## Keynote Lecture Program

**Monday, 22 August [hotel nikko fukuoka]**

### Keynote Lecture

| L-01 | The origin and genetic diversity of Japanese Wagyu  
|      | Hideyuki Mannen  
|      | Laboratory of Animal Breeding and Genetics, Graduate School of Agricultural Science, Kobe University, Japan |
| L-02 | The application of heart rate reactions associated with behavior test in the predict of training success of guide dogs  
|      | Fang Han, Zijuan Zhou, Jingyu Wang  
|      | Dalian Medical University, China |

**Chair: Kei Hanzawa**  
Tokyo University of Agriculture

| L-03 | Empowering research capability for the sustainable animal production, environment and human resource development  
|      | Metha Wanapat¹, Anusorn Cherdthong¹, Sungchhang Kang², Chaowarit Mapato¹  
|      | ¹ Tropical Feed Resources Research and Development Center (TROFREC), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand  
|      | ² Agricultural Unit, Department of Education, National Institute of Education, Cambodia |
| L-04 | The future of sheep production in New Zealand  
|      | Hugh T. Blair  
|      | AL Rae Centre for Genetics and Breeding, IVABS, Massey University, New Zealand |

**Chair: Takeyuki Ozawa**  
Nippon Veterinary and Life Science University
## Symposium Program

### Day1: Tuesday, 23 August  [Kyushu Sangyo University]

#### Symposium 01

**SY-01** Empowerment of Goat Farmer Through Mutual Trust  
*Organizer:* Tanri Giling Rasyid  
Animal Science of Hasanuddin University, Indonesia

#### Symposium 02

**SY-02** Comparative Extraction and Analysis of Antioxidant Properties and Protein Potentials to The Total Scavenging Capacity from Indigenous Honey Bees of Indonesia  
*Organizer:* Firman Jaya  
Department of Animal Food Technology, Faculty of Animal Husbandry, University of Brawijaya, Indonesia

#### Symposium 03

**SY-03** Animal Nutrition and Metabolism  
*Organizer:* Tohru Matsui  
Japanese Society for Animal Nutrition and Metabolism, Japan

#### Symposium 04

**SY-04** CADIC International Symposium Livestock revolution in Asia -Risk and opportunity-  
*Organizer:* Tomoyuki Kawashima  
Miyazaki University, Japan
### Day2: Wednesday, 24 August  [Kyushu Sangyo University]

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<tr>
<th>Symposium 05</th>
<th>Wednesday, 24 August 8:30-11:30 Room N202</th>
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<tr>
<td>SY-05</td>
<td>Mineral Toxic in Tropical Forage and Selected Tissue of Cattle</td>
</tr>
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<td>Organizer: Syamsuddin Hasan</td>
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<td></td>
<td>Animal Science of Hasanuddin University, Indonesia</td>
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<tr>
<th>Symposium 06</th>
<th>Wednesday, 24 August 8:30-11:30 Room N203</th>
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<tbody>
<tr>
<td>SY-06</td>
<td>Animal Physiology</td>
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<tr>
<td></td>
<td>Organizer: Achadiah Rachmawati</td>
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<td>University of Brawijaya, Indonesia</td>
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<tr>
<th>Symposium 07</th>
<th>Wednesday, 24 August 8:30-11:30 Room N204</th>
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<tr>
<td>SY-07</td>
<td>Current Status of Animal Biotechnology and the Application for Livestock Production</td>
</tr>
<tr>
<td></td>
<td>Organizer: Hiroshi Kagami</td>
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<td></td>
<td>Faculty of Agriculture, Shinshu University, Japan</td>
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<th>Symposium 08</th>
<th>Wednesday, 24 August 8:30-12:00 Room N303</th>
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<tr>
<td>SY-08</td>
<td>Future Beef Production in Asia</td>
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<td>Organizer: Takafumi Gotoh</td>
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<td>Kyushu University, Japan</td>
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<tr>
<th>Symposium 09</th>
<th>Wednesday, 24 August 10:00-11:30 Room S207</th>
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<tr>
<td>SY-09</td>
<td>The new role and needs of traditional livestock, such as goats and chickens</td>
</tr>
<tr>
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<td>Organizer: Katsuyuki Yamashita</td>
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<td>Fukuoka prefecture, Japan</td>
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### Day3: Thursday, 25 August  [Kyushu Sangyo University]

<table>
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<tr>
<th>Symposium 10</th>
<th>Thursday, 25 August 13:30-16:30 Room N204</th>
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<tbody>
<tr>
<td>SY-10</td>
<td>Impact, Adaptation and Mitigation of Heat-Stress in Livestock</td>
</tr>
<tr>
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<td>Organizer: Vishwajit Chowdhury</td>
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<td></td>
<td>Faculty of Arts and Science, Kyushu University, Japan</td>
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## Workshop Program

### Day1: Tuesday, 23 August  [Kyushu Sangyo University]

<table>
<thead>
<tr>
<th>Workshop 01</th>
<th>Mitigation of greenhouse gases and adaptation to climate change in livestock production systems</th>
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<tbody>
<tr>
<td><strong>WS-01</strong></td>
<td><strong>Tuesday, 23 August  8:30-19:00 Room S201</strong></td>
</tr>
<tr>
<td>Organizer:</td>
<td>Akio Takenaka</td>
</tr>
<tr>
<td></td>
<td>Food and Fertilizer Technology Center (FFTC) in Taiwan, Taiwan, Republic of China</td>
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<tr>
<th>Workshop 02</th>
<th>Dairy production with local feed resources in Asian countries</th>
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<tr>
<td><strong>WS-02</strong></td>
<td><strong>Tuesday, 23 August  9:00-11:00 Room S205</strong></td>
</tr>
<tr>
<td>Organizer:</td>
<td>Taketo Obitsu</td>
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<tr>
<td></td>
<td>The Research Center for Animal Science, Hiroshima University, Japan</td>
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<tr>
<th>Workshop 03</th>
<th>Using lesser galangal (<em>Alpinia officinarum</em> Hance) on pig diet</th>
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<tbody>
<tr>
<td><strong>WS-03</strong></td>
<td><strong>Tuesday, 23 August  12:00-14:00 Room S205</strong></td>
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<tr>
<td>Organizer:</td>
<td>Tai Nang Nguyen</td>
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<td></td>
<td>Hung Vuong University, Vietnam</td>
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<tr>
<th>Workshop 04</th>
<th>Present situation and future prospect of goat production and the future direction in Asian-Australasian countries</th>
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<tbody>
<tr>
<td><strong>WS-04</strong></td>
<td><strong>Tuesday, 23 August  12:00-14:00 Room S206</strong></td>
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<tr>
<td>Organizer:</td>
<td>Naoshige Abe</td>
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<tr>
<td></td>
<td>College of Agriculture Tamagawa University, Japan</td>
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Day 2: Wednesday, 24 August  [Kyushu Sangyo University]

**Workshop 05**

<table>
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<tr>
<th>Workshop 05</th>
<th>Wednesday, 24 August 9:00-11:00 Room S205</th>
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<tbody>
<tr>
<td><strong>WS-05</strong></td>
<td><strong>Gut mucosal functions and health in poultry</strong></td>
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| **Organizer:** Yukinori Yoshimura &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbs
Oral Session Program

Day 1: Tuesday, 23 August [Kyushu Sangyo University]

Oral Session 01: Focus Session Animal Breeding, Genetics & Reproduction

Tuesday, 23 August 9:00-11:00 Room N201

**Chairs:** Yoshinobu Uemoto, National Livestock Breeding Center
Koji Sugiura, The University of Tokyo

**O-01-1** Improvement the accurate genetic estimation of milk yield trait by addition of wind speed to THI in crossbred Thai Holstein

Watcharapong Teawyuneyong\(^1\), Monchai Duangjinda\(^{1,2}\), Sayan Buaban\(^1\), Vibuntita Chankitisakul\(^{1,2}\), Wuttigrai Boonkum\(^{1,2}\)

\(^1\) Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand,
\(^2\) Thermo-tolerance Dairy Cattle Research Group, Khon Kaen University, Thailand,
\(^3\) Bureau of Biotechnology in Livestock Production, Department of Livestock Development, Thailand

**O-01-2** Estimation of additive genetic variance due to each autosome for carcass traits in Japanese Black cattle

Shinichiro Ogawa\(^1\), Hirokazu Matsuda\(^1\), Yukio Taniguchi\(^1\), Toshio Watanabe\(^2\), Yoshikazu Sugimoto\(^3\), Hiroaki Iwaisaki\(^1\)

\(^1\) Graduate School of Agriculture, Kyoto University,
\(^2\) National Livestock Breeding Center,
\(^3\) Shirakawa Institute of Animal Genetics

**O-01-3** Analysis of realized heritability and other genetic parameters in a long-term selection experiment for non-destructive deformation in White Leghorns

Olivier Gervais\(^1\), Keijiro Nirasawa\(^2\), Christian Vincenot\(^1\), Yoshitaka Nagamine\(^3\), Kazuyuki Moriya\(^1\)

\(^1\) Kyoto University, Graduate School of Informatics,
\(^2\) NARO Institute of Livestock and Grassland Science,
\(^3\) Nihon University, College of Bio-resource Sciences

**O-01-4** Accuracy of Genomic-Polygenic Prediction for Milk Yield and Fat Percentage in the Thai Dairy Cattle Population

Danai Jattawa\(^1\), Skorn Koonawoottritrirong\(^1\), Mauricio A. Elzo\(^2\), Thanathip Suwanasopee\(^1\)

\(^1\) Department of Animal Science, Faculty of Agriculture, Kasetsart University, Thailand,
\(^2\) Department of Animal Sciences, University of Florida, USA

**O-01-5** Screening of embryo secreted factors using bovine elongated embryos

Hironori Masaka\(^1\), Sayed Ali Askar Musavi\(^{1,2}\), Md. Rashedul Islam\(^{1,3}\), Nobuhiro Yamauchi\(^1\)

\(^1\) Department of Animal and Marine Bioresource Sciences, Faculty of Agriculture, Kyushu University, Japan,
\(^2\) Department of Animal Science Agriculture Faculty Balkh University Afghanistan,
\(^3\) Department of Genetics and Animal Breeding, Faculty of Veterinary and Animal Science, Hajee Mohammad Danesh Science and Technology University, Bangladesh

**O-01-6** Genetic fluctuation study with microsatellite markers in germplasm-preserved Wujie Black Muscovy

Yi-Ying Chang\(^{1,2}\), Jeng-Fang Huang\(^1\), Chih-Feng Chen\(^1\), Hsiu-Chou Liu\(^1\)

\(^1\) Ilan Branch, Livestock Research Institute, Council of Agriculture, Executive Yuan, Taiwan,
\(^2\) Department of Animal Science, National Chung Hsing University, Taiwan,
\(^3\) Livestock Research Institute, Council of Agriculture, Executive Yuan, Taiwan

**O-01-7** Establishment and characterization of bovine derived placenta stem cells

Kang-You Lu, Shao-Yu Peng
National Pingtung University of Science and Technology
0-01-8  Dynamics of spermatogenetic cells on proliferation and desquamation during seasonal reproductive cycle in wild mice
  Jun Ito
  Graduate school of science and technology in Niigata University

0-01-9  Development of an in vitro model to study uterine functions using in vitro cultured rat uterine explants
  Md. Rashedul Islam\textsuperscript{1,2}, Yuka Yoshii\textsuperscript{1}, Yuko Ikeguchi\textsuperscript{1}, Mohamed El-Sharawy\textsuperscript{1,3}, Nobuhiko Yamauchi\textsuperscript{1}
  \textsuperscript{1}Department of Animal and Marine Bioresource Sciences, Faculty of Agriculture, Kyushu University, Japan,
  \textsuperscript{2}Department of Genetics and Animal Breeding, Faculty of Veterinary and Animal Science, Hajee Mohammad Danesh Science and Technology University, Bangladesh,
  \textsuperscript{3}Animal Production Department, Faculty of Agriculture, Kafrelsheikh University, Egypt

0-01-10  The effects of different oocyte mtDNA haplotypes on somatic cell nuclear transfer embryos
  Kanokwan Srirattana\textsuperscript{1,2}, Justin C. St. John\textsuperscript{1,2,3}
  \textsuperscript{1}Centre for Genetic Diseases, Hudson Institute of Medical Research, Australia,
  \textsuperscript{2}Department of Molecular and Translational Science, Monash University, Australia,
  \textsuperscript{3}MitoStock Pty Ltd, Australia

Oral Session 02: Focus Session  Animal Welfare & Health Management, others

Chair: Masato Aoyama  Utsunomiya University

0-02-1  Estimation of nitrogen, phosphorus and potassium flows in dairy cattle production in western China
  Lin Wang\textsuperscript{1}, S. T. Takashi Tanaka\textsuperscript{1,2}, Hiroki Anzai\textsuperscript{1}, Yuki Hama\textsuperscript{1}, Kazato Oishi\textsuperscript{1}, Chagan Irbis\textsuperscript{2}, Hajime Kumagai\textsuperscript{1}, Tatsuya Inamura\textsuperscript{1}, Hiroyuki Hirooka\textsuperscript{1}
  \textsuperscript{1}Graduate School of Agriculture, Kyoto University, Japan,
  \textsuperscript{2}Biotechnology Research Center, Kunming University of Science and Technology, China

0-02-2  Influence of age on beef calves’ play behaviour in an indoor and outdoor environment of a free barn
  Yi Zhang\textsuperscript{1}, Ken-ichi Takeda\textsuperscript{2}
  \textsuperscript{1}Shinshu University, Graduate School of Agricultural Science, Japan,
  \textsuperscript{2}Shinshu University, Academic Assembly, Institute of Agricultural, Japan

0-02-3  A study on the correction factors between temperature-humidity index and body surface temperature for Hanwoo heifer (Bos taurus coreanae)
  SeYoung Jang\textsuperscript{1}, Na-Yeon Kim\textsuperscript{1}, Sung-Jin Kim\textsuperscript{1}, Jung-Hwan Jeon\textsuperscript{2}, Won-Mo Cho\textsuperscript{1}, Byeong-Tae Jeon\textsuperscript{1}, Sang-Ho Moon\textsuperscript{1}
  \textsuperscript{1}Division of Food Bio Science, Konkuk University, \textsuperscript{2}Nation Institute of Animal Science, ADA, Korea

0-02-4  Milk Acidification to Control the Growth of Salmonella Dublin in Infected Milk
  Alysia Parker, Katrina Bosward, John House, Mark Hazleton, Paul Sheehy
  \textsuperscript{1}The University of Sydney, Faculty of Veterinary Science, School of Life and Environmental Sciences

0-02-5  Degradation of oleic acid and conversion to biogas during a mesophilic anaerobic process
  Yuki Matsumoto, Yasuhiro Fukuda, Yutaka Nakai, Chika Tada
  Laboratory of Sustainable Animal Environmental Science, Graduate School of Agricultural Science, Tohoku University, Japan

0-02-6  THE CHARACTERIZATION OF ADIPOSE TISSUE VIA A METABOLIC SYNDROME MINIPIG MODEL
  Chia-Yu Wang, Twin-Way Wu, Jyun-Wei Chen, Sin-Jin Li, Ching-Yi Chen
  National Taiwan University
0-02-7  Differential levels of activity and stress response between Djungarian hamster (P. sungorus) and Robosovskii hamster (P. roborovskii)
Hiromi Ikeda¹, Takeshi Yamaguchi¹, Momoko Kodaira¹, Mohammad A. Bahry¹, Vishwajit S. Chowdhury², Shinobu Yasuo¹, Mitsuhiro Furuse¹
¹Laboratory of Regulation in Metabolism and Behavior, Faculty of Agriculture, Kyushu University,
²Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University

0-02-8  The Role of Skeletal Muscle Glucocorticoid Receptors in Photoperiodic Response of Depression-like Behaviors
Ayako Tashiro, Ryosei Goda, Satomi Shibata, Yusuke Takai, Tsuyoshi Otsuka, Tatsuhito Uchiwa, Mitsuhiro Furuse, Shinobu Yasuo
Laboratory of Regulation in Metabolism and Behavior, Faculty of Agriculture, Kyushu University, Japan

0-02-9  Effect of postnatal photoperiod on body weight and metabolomics profiles in skeletal muscle and plasma in mice
Tatsuhito Uchiwa, Yusuke Takai, Ayako Tashiro, Satomi Shibata, Mitsuhiro Furuse, Shinobu Yasuo
Laboratory of Regulation in Metabolism and Behavior, Faculty of Agriculture, Kyushu University, Japan

0-02-10  Effect of mastitis on pregnancy function in prepartum goats
Nozomi Kodama, Yukinori Yoshimura, Naoki Isobe
Hiroshima University

Oral Session 03: Animal Nutrition (Non-Ruminants) (1)
Tuesday, 23 August  9:00-11:00  Room N303

Chairs: Rusdi Rusdi  Tadulako University
Sirilaophaisan Srisuda  Rajamongala University of Technology-Isan, Sakhonnakhon Campus

0-03-1  Effect of Natural Acidifier and Phytobiotic Addition in Non-Encapsulation and Encapsulation Form on Egg Quality of Laying Hens
Maya Septiana¹², Muhammad Halim Natsir⁵, Osfar Sjoján²
¹Department of Tropical Agriculture and International Cooperation, National Pingtung University of Science and Technology, Taiwan,
²Faculty of Animal Husbandry, University of Brawijaya, Indonesia

0-03-2  Is eleutherine (Eleutherine americana) potential as feed additive for poultry?
Rusdi Rusdi, Asriani Hasanuddin, Rosmiati Arief
Faculty of Animal Husbandry and Fisheries, Tadulako University, Palu Indonesia

0-03-3  UTILIZATION EFFECT OF BREAD WASTE AS CORN SUBSTITUTION ON HYBRID DUCK PERFORMANCES
Irfan Djunaidi¹, Dini Hardini¹²
¹The Assessment Institute for Agricultural Technology, Indonesia,
²Faculty of Animal Husbandry, Brawijaya University, Indonesia

0-03-4  Responses of hens fed high levels of selenium from selenium-enriched kale sprout
Anut Chantiratikul¹, Lalita Borisuth¹, Orawan Chinnrasri¹, Piyanete Chantiratikul²
¹Faculty of Technology, Mahasarakham University, ²Faculty of Science, Mahasarakham University

0-03-5  Effect of water extract of Green Grass Jelly leaves (Premna oblogifolia merr) on Intestinal Characteristics and Performances of Laying Hen
Eko Widodo, Edhy Sudjarwo, Anna Lidiyawati
University of Brawijaya Indonesia
O-03-6  EFFECT OF MINERAL MIXTURES SUPPLEMENTATION IN DRINKING WATER ON CARCASS QUALITY, GUT MORPHOLOGY AND GUT MICROFLORA OF BROILER CHICKENS

Nurhazirah Shazali1, Teck Chwen Loh1,2, Hooi Ling Foo3,4, Jalaludin Syed1

1Department of Animal Science, Faculty of Agriculture Universiti Putra Malaysia, Malaysia,
2Institute of Tropical Agriculture, Universiti Putra Malaysia, Malaysia,
3Department of Bioprocess Technology, Faculty of Biotechnology and Biomolecular Sciences Universiti Putra Malaysia, Malaysia,
4Institute of Biological Science, Universiti Putra Malaysia, Malaysia

O-03-7  Effects of Multi-probiotics and Synbiotics on Laying Ducks Performance and Egg Quality

Srisuda Sirilaophaisan1, Paiwan Punyakaew1, Pongsathorn Gunun1, Thachawech Kimprasit1, Nattaya Banglab1,2

1Rajamangala University of Technology Isan Sakon Nakhon Campus,
2K.M.P. Biotech Co., LTD.

O-03-8  Effect of Dried Tomato Meal (Solanum lycopersicum) in Diet on Performance and Egg Quality of Native Chickens

Jein Rinny Leke, Jet Saartje Mandey, Jacqueline T Laihad, Friets Ratulangi
Sam Ratulangi University Animal Husbandry Faculty

O-03-9  Digestibility Value of Broiler Diet Containing Fresh Mulberry (Morus alba) Leaves

Jet Saartje Mandey, Cathrien A Rahasia, Zebedeus Dady
Sam Ratulangi University Animal Husbandry Faculty

O-03-10  EFFECTS OF SUPPLEMENTAL EFFECTIVE MICROORGANISM ON PERFORMANCE, SOME HISTOLOGICAL AND BLOOD PARAMETERS OF BROILER

Ladine Celik1, Mustafa Cikrikci1, Ugur Serbester1, Yusuf Uzun1, Sait Polat1, Fatma Yenilmez3, Mehmet Celik5, Osman Gulnaz2, Hasan Rustu Kutlu1

1Cukurova University Faculty of Agricultural Department of Animal Science,
2Cukurova University Faculty of Medicine Department of Department of Basic Medical Sciences,
3Cukurova University Vocational School of Tufanbeyli,
4Cukurova University Faculty of Fisheries Department of Fisheries and Seafood Processing Technology,
5Cukurova University Faculty of Education Department of Primary Education

Oral Session 04: Focus Session Animal Nutrition, Feeds and Feeding

Tuesday, 23 August  11:30-13:30  Room N201

Chairs: Taketo Obitsu Hiroshima University
Yasuo Kobayashi Hokkaido University
Haoming Wu Okayama University

O-04-1  How do Thai consumers respond to quality of pork with different marbling levels?: a preliminary study in different age ranges

Sawankamol Noidad1, Rutcharin Limsupavanich1, Suntaree Suwansichon2, Ronachai Sitthigripong1, Chanporn Chaosap7

1Department of Animal Production Technology and Fisheries, Faculty of Agricultural Technology, King Mongkut’s Institute of Technology Ladkrabang, Thailand,
2Department of Product Development, Faculty of Agro-Industry, Kasetsart University,
3Department of Agricultural Education, Faculty of Industrial Education, King Mongkut’s Institute of Technology Ladkrabang, Thailand

O-04-2  THE ROLE OF FORAGES IN REDUCING HOUSEHOLD LABOUR DEMANDS OF CATTLE FEEDING DURING THE DRY SEASON IN CAMBODIA

Katherine Ashley1, James Robert Young1, Kea Pha2, Sothoeun Suon2, Peter Andrew Windsor1, Russell David Bush1

1Faculty of Veterinary Science, The University of Sydney, Australia,
2Department of Animal Health and Production, Cambodia
O-04-3 Influence of Season on the Yield and Nutritional Composition of Indigofera zollingeriana at Different Cutting Intervals
Loretta Romero¹, Edgar Orden², Neal Del Rosario², Jovani Jo Galmgam², Rhanny Gonzales²
¹Benguet State University, ²Central Luzon State University

O-04-4 Enrichment the Nutritive Value of Cassava Top Silage with Molasses and Urea Supplement Using Gas Production Technique
Sungchhang Kang¹, Metha Wanapat¹, Ahkarapon Nunoi²
¹Agricultural Unit, Department of Education, National Institute of Education, Cambodia, ²Tropical Feed Resources Research and Development Center (TROFREC), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand

O-04-5 The Effect of Euglena (Euglena gracilis) Supplementation on Intake, Digestibility and Nitrogen Balance in Sheep
Aemiro Ashagrie¹, Watanabe Shota², Suzuki Kengo², Hanada Masaaki¹, Umetsu Kazutaka¹, Nishida Takehiro¹
¹Obihiro University of Agriculture and Veterinary Medicine, ²Euglena Co., Ltd, Japan

O-04-6 Influence of premix containing mangosteen peel powder and banana flower powder on rumen microbial population in swamp buffaloes
Thiwakorn Ampapon¹, Metha Wanapat¹, Kampanat Phesatcha¹, Sungchhang Kang²
¹Tropical Feed Resources Research and Development Center (TROFREC), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand, ²Agricultural Unit, Department of Education, National Institute of Education, Cambodia

O-04-7 Effect of crude glycerin in diets on growth performance, ruminal pH and blood metabolites of Kamphaeng Saen steers
Nirandorn Nakdaeng, Lerchat Boonek, Sirirat Buaphan, Taweeporn Raungprim, Sutisa Majarune, Wisut Maitreejet
Department of Animal Science, Faculty of Agriculture at Kamphaengsaen, Kasetsart University, Kamphaeng Saen Campus

O-04-8 Effects of Difructose Anhydride III Supplementation to Colostrum Replacers on Immunoglobulin G Absorption and Serum Immunoglobulin G in Newborn Calves
Aung Htun¹, Yasuhiro Suzuki², Yuki Koike², Tadashi Sato², Masaaki Hanada²
¹United Graduate School of Agricultural Science, Iwate University, Japan, ²Obihiro University of Agriculture and Veterinary Medicine, Japan

O-04-9 Effects of mycosorbent mixed with turmeric (Curcuma longa) powder to ameliorate the toxic effects of mycotoxins contaminated corn in ducks
Kantaphat Rattanasinthuphong¹, Pawadee Pakdee¹, Bundit Tengjaroenkul²
¹Department of Animal science, Faculty of Agriculture, Khon Kaen University, Thailand, ²Faculty of Veterinary Medicine, Khon Kaen University, Thailand

O-04-10 Effects of fermentation period on chemical composition and in vitro digestibility of spineless cactus silage
Hitomi Ichimura¹, Satoshi Ishikawa², Makoto Kondo³, Yoshiaki Hayashi¹,²
¹Graduate School of Agriculture, Meijo University, ²Faculty of Agriculture, Meijo University, ³Graduate School and Faculty of Bioreources, Mie University
Oral Session 05: Focus Session Poultry Science, Dairy Science and Industry
Tuesday, 23 August 11:30-13:30 Room N301

Chair: Khotimah Khusnul  Muhammadiyah University in Malang

O-05-1  Expression And Localization Of Cyclooxygenases In The Oviduct Of Laying Hens During The Ovulatory Cycle
Moustafa Elhamouly¹, Yukinori Yoshimura¹,², Naoki Isobe¹,²
¹Hiroshima University, Graduate School of Biosphere Science, ²Hiroshima University, RCAS

O-05-2  Changes on bursal B cells during embryonic development and early life after the hatching in chicken
Kwang Hyun Ko¹,²
¹Department of Agricultural Biotechnology and Research Institute for Agriculture and Life Sciences, Seoul National University, Korea, ²Biomodulation major and Center for Food Bioconvergence, Seoul National University, Korea

O-05-3  Effects of probiotics on antimicrobial peptides and pro-inflammatory cytokines expression in response to LPS in the cecum of broiler chicks
Elsayed Mohammed¹, NAOKI ISOBE¹,², YUKINORI YOSHIMURA¹,²
¹Graduate School of Biosphere Science, Hiroshima University, ²RCAS, Hiroshima University

O-05-4  CpG oligodeoxynucleotide from Streptococcus thermophilus induces type 2 innate lymphoid cells
Takuma Okajima¹, Yoshinari Yamamoto¹,², Tasuku Ogita³, Takeshi Shimosato¹,²,⁴
¹Graduate School of Agriculture, Shinshu University, ²Interdisciplinary Graduate School of Science and Technology, Shinshu University, ³Research Fellow of the Japan Society for the Promotion of Science (JSPS), ⁴Institute for Biomedical Sciences, Shinshu University

O-05-5  Investigation of possible mechanisms of Lactobacillus kefiri of ameliorating hyperglycemia
Shun-Yu Huang, Ming-Ju Chen, Shih-Hung Wei
Department of Animal Science and Technology, National Taiwan University

O-05-6  Anti-Obesity Effect of Lactobacillus mali on High-Fat Diet-Induced Obesity
Yung-Tsung Chen¹, Yu-Chun Lin¹,², Jin-Seng Lin³, Ming-Ju Chen¹
¹Department of Animal Science and Technology, National Taiwan University, Taiwan, ²Livestock Research Institute, Council of Agriculture, Executive Yuan, Taiwan, ³SynbioTech Incorporation, Taiwan

O-05-7  Doi Moi (reformation) of production yield on dairy milk and rice in Vietnam
Hiromitsu Moriyama¹, Xuan Luu Tang²
¹The Open university of Japan, ²Ba Vi cattle and forage research Center, National Institute of Animal Science

O-05-8  Cognitive and Physiological Effects of Microalgae-DHA Egg Consumption related to the Go/No-Go task in Healthy Thai Men.
Mongkol Kaewsutas¹, Ariya Sarikaphuti¹, Thamthiwat Nararatwanchai¹, Prapas Patchanee²
¹School of Antiaging and Regenerative Medicine, Mae Fah Luang University, Thailand, ²Faculty of Veterinary Medicine, Chiang Mai University

O-05-9  Construction of a platform for the identifying adulteration in fresh milk
Hsin-Wen Chang¹, Ming-Ju Chen¹, Cheng-Chih Hsu², Ming-Lun Chiang¹
¹Department of Animal Science and Technology, National Taiwan University, ²Department of Chemistry, National Taiwan University, ³Department of Tourism and Hospitality Management, Kainan University

O-05-10 Sweet Threshold of Lysozyme from Indonesian Kampong Chicken and Cihateup Duck
Wulandari Zakiah¹, Fardiaz Dedi², Thenawiyya Maggy², Dewi Yuliana Nancy²
¹Department of Animal Production and Technology, Faculty of Animal Science, Bogor Agricultural Technology, ²Department of Food Science and Technology, Faculty of Agriculture and Technology, Bogor Agricultural University
Oral Session 06: Animal Nutrition (Non-Ruminants) (2)

Tuesday, 23 August 11:30-13:30 Room N303

Chairs: Wahyu Widodo University of Muhammadiyah Malang
Theerawit Poeikhampha Kasetsart University
Djunaidi Irfan Brawijaya University

O-06-1 Influence of Fermented Pumpkin Supplementation on Growth Performance and Feed Utilization in Thai Native Pradu Hang Dum Chicken
Chayut Dongpaleethun1, Somchart Thana2, Choke Sorachakura2, Norakamol Laorodphan3, Kawintra Khangkhan4, Khanchai Danmek4

1Phayao Livestock Research Station, Department of Livestock Development, Thailand, 2Program of Animal Science, School of Agriculture and Natural Resources, University of Phayao, Thailand, 3Program of Animal Science, Faculty of Food and Agricultural Technology, Pibulsongkram Rajabhat University, Thailand, 4Program of Biotechnology, School of Agriculture and Natural Resources, University of Phayao, Thailand

O-06-2 Effect of Proportion of Fatty Acids from Soybean Oil and Beef Tallow on Fatty Acids Accumulation in Egg Yolk
Putthaporn Pumrojana1, Suwit Terapuntuwat2, Parwadee Pakdee2, Nitchanan Chukerd3, Nantiya Saetiew4, Watchara Ninphet1

1Division of Animal Science, Faculty of Science and Technology, Muban Chombueng Rajabhat University, 2Department of Animal Science, Faculty of Agriculture, Khon Kaen University

O-06-3 Effect of Low Protein Amino Acid Supplementation on Growth Performance and avANT Gene Expression in the Muscle of Betong Chicken
Wiriya LOONGYAI1, Jiraporn Marayat1, Panwadee Sopannarath1, Chaowit Rakangthong1, Theerawit Poeikhampha1, Kanokporn Pourgpong1, Phongthorn Kongmun1, Phuwadol Bangra2, Chaiyapoom Bunchasak1

1Department of Animal Science, Faculty of Agriculture, Kasetsart University, Bangkok, Thailand 10900, 2School of Science, Walailak Universviersity, Thasala, Nakhonsithammarat, 80160, Thailand

O-06-4 Effect of Low Protein Amino Acid-Supplemented Diets on Growth Performance and Carcass Characteristics in Betong Chicken (KU Line)
Jiraporn Marayat, Choawit Rakangtong, Panwadee Sopannarath, Chaiyapoom Bunchasak, Wiriya Loongyai

Department of Animal Science, Faculty of Agriculture at Kasetsart University, THAILAND

O-06-5 FEEDING VALUE OF FERMENTED SOYBEAN MEAL AND HYDROLYZED PEPTONE IN BROILERS
Rhona Nina R. Reyes, Rommel C. Sulabo

Animal Nutrition Division, Animal and Dairy Sciences Cluster, University of the Philippines Los Baños, Philippines

O-06-6 Effect of Coconut Oil Supplementation in Diet on Performance, Carcass Quality and Coccidia Control in Broilers
Chayanan Pukkung1, Parwadee Pakdee1, Bundit Tengjaroenkul1, Padsakorn Pootthachaya1

1Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand, 2Department of Medicine, Faculty of Veterinary Medicine, Khon Kaen University, Thailand

O-06-7 The Combination of Coconut Oil and Turmeric Powder Supplementation in Diets on Performance, Carcass and Coccidia Control in Broilers.
Padsakorn Pootthachaya1, Parwadee Pakdee1, Bundit Tengjaroenkul1, Chayanan Pukkung1

1Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand, 2Department of Medicine, Faculty of Veterinary Medicine, Khon Kaen University, Thailand

O-06-8 Comparative Effect of Corn and Whole Wheat in Diets on Egg Production and Egg Quality of Laying Hens
Theerawit Poeikhampha, Khanittha Saikhlai, Choawit Rakangthong, Chaiyapoom Bunchasak

Kasetsart University
O-06-9  Effect of Corn Substitution with Noodle Waste and Fortified Noodle Waste on Growth Performance and Carcass Quality of Broilers
Ahmad Windu Bahari1,2, Lathifah Fitriyani Dewi1, Muhammad Halim Natsir2, Osfar Sjofjan2
1Department of Tropical Agriculture and International Cooperation, National Pingtung University of Science and Technology, Taiwan, 
2Faculty of Animal Husbandry, University of Brawijaya, Indonesia

O-06-10  DIETARY FIBER DIGESTIBILITY AND APPARENT METABOLIZABLE ENERGY IN CASSAVA MEAL AND CASSAVA RESIDUE PELLET FED TO BROILERS
Ung Puthéany, Hazel Grace D. Masilungan, Rommel C. Sulabo
Animal Nutrition Division, Animal and Dairy Sciences Cluster, University of the Philippines Los Baños, Philippines

Oral Session 07: Focus Session  Animal Nutrition (Non-Ruminants) (1)

Chair: Anut Chantiratikul  Mahasarakham University

O-07-1  Effect of L-leucine in ovo injection on post hatch performance in broiler chicks
Guofeng Han1, Hui Yang1, Mohammad A Bahry1, Phuong V Tran1, Phong H Do1, Mitsuhiro Furuse1, Vishwajit S Choudhury2
1Laboratory of Regulation in Metabolism and Behavior, Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, Japan, 
2Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University, Japan

O-07-2  Effects of standardized ileal digestible (SID) methionine and cysteine levels on growth performance and blood parameter of pigs
Chong Hau Goh1, Teck Chwen Loh1,2, Hooi Ling Foo3,4
1Department of Animal Science, Faculty of Agriculture, Universiti Putra Malaysia, 
2Institute of Tropical Agriculture, Universiti Putra Malaysia, Malaysia, 
3Department of Bioprocess Technology, Faculty of Biotechnology and Biomolecular Sciences, 
4Institute of Biological Science; Universiti Putra Malaysia, Malaysia

O-07-3  Effects of different dietary oils and L-Arginine supplementation in diet on performance, intestinal morphology and serum immunoglobulin level in broiler
Jannatara Khuton1,2, Teck Chwen Loh2, Henny Akit1, Hooi Ling Foo2, Rosfarizan Mohamad1
1Department of Animal Science, Faculty of Agriculture, University Putra Malaysia, Malaysia, 
2Department of Animal Science and Nutrition, Chittagong Veterinary and Animal Sciences University, Bangladesh

O-07-4  Effects of Standardized Ileal Digestible Valine:Lysine Ratio on Performance, Milk Composition and Plasma Indices of Lactating Sows
Yetong Xu, Zhikai Zeng, Xiao Xu, Qiyu Tian, Xiaokang Ma, Shenfei Long, Xiangshu Piao
China Agricultural University

O-07-5  Angelica gigas Nakai root powder supplementation improves growth performance and modulates splenic heat shock proteins of broiler chickens
Wenchie Marie Lumbera1, Emil Joseph Vergara1, Seung-Hak Yang1, Seong-Gu Hwang1
1Department of Animal Life and Environmental Science, Hankyong National University, Korea, 
2National Institute of Animal Science, Rural Development Administration, Korea

O-07-6  EFFECT OF SUPPLEMENTAL ZINC SOURCES AND ZINC FEEDING REGIMEN ON GROWTH PERFORMANCE, DIARRHEA OCCURRENCE AND GUT INTEGRITY IN NURSERY PIGS
Noel B. Lumbo1, Therese A. Collantes2, Rommel C. Sulabo1
1Animal and Dairy Sciences Cluster, University of the Philippines Los Baños, Philippines, 
2College of Veterinary Medicine, University of the Philippines Los Baños, Philippines
O-07-7  Effect of Dried Banana (Musa sapientum L.) in Diet on Growth Performance and Intestinal Morphology of Nursery Pigs  
Tanachot Pengsawad, Chaiyapoom Bunchasak, Choawit Rakangthong, Theerawit Poeikhampha  
Kasetsart University

O-07-8  Effect of Dietary Fish Oil in Combination with Tomato Powder on Egg Polyunsaturated Fatty Acids Profile of Native Laying Hens  
Faizal Andri¹, Aji Sukoco², Taufich Hilman², Eko Widodo³  
¹Postgraduate Student, Faculty of Animal Husbandry, University of Brawijaya, Indonesia,  
²Alumni, Faculty of Animal Husbandry, University of Brawijaya, Indonesia,  
³Department of Animal Nutrition and Feed Science, Faculty of Animal Husbandry, University of Brawijaya, Indonesia

O-07-9  Effect of α-Galactosidase Supplementation in Diet on Egg Production and Egg Quality of Laying Hens  
Chonladda Harnkaew, Chaiyapoom Bunchasuk, Choawit Rakangtong, Theerawit Poeikhampha  
Kasetsart University

O-07-10  BIOLOGICAL EFFICACY OF L-METHIONINE AS SUPPLEMENTAL METHIONINE SOURCE IN BROILER DIETS  
Krystalene S. Decena, Rommel C. Sulabo  
Animal Nutrition Division, Animal and Dairy Sciences Cluster, University of the Philippines Los Baños, Philippines

Oral Session 08: Animal Breeding (1)  
Tuesday, 23 August 14:30-16:30 Room N202

Chairs: Luqman Hakim  
Aubrey Joy Macugay Balbin  
University of Brawijaya  
ISABELA STATE UNIVERSITY

O-08-1  Contribution of genotyped cow inclusion in the Holstein bull reference population on genomic evaluation  
Yoshinobu Uemoto, Takefumi Osawa, Junichi Saburi  
National Livestock Breeding Center

O-08-2  PHENOTYPIC RELATIONSHIPS AMONG SOMATIC CELL COUNT AND UDDER TRAITS IN DAIRY GOATS  
Mauricio Valencia-Posadas¹, Lisa Shepard², Abner J Gutiérrez-Chávez¹, Alma A Lechuga-Aranna¹, César A Angel-Sahagún¹  
¹Life Science Division, CIS, University of Guanajuato, ²American Dairy Goat Assoc. USA

O-08-3  THE STUDY OF QUANTITATIVE AND QUALITATIVE TRAITS FOR RABBIT F1 CROSSBREDS  
Mudawamah Mudawamah¹,², Irawati Dinasari Retnaningtyas¹, M Zainul Fadli², Gatot Ciptadi³  
¹Faculty of Animal Science, University of Islam Malang, ²Faculty of Medicine, University of Islam Malang, ³Faculty of Animal Husbandry, Brawijaya University

O-08-4  BALI CATTLE OUTPUT INSTALLATION OF POPULATION IN THE AREA POTENTIAL AS A SOURCE OF BALI CATTLE BREEDING  
Agus Budiarto, Luqman Hakiim, VM. Ani Nurgiartinungsih, Gatot Ciptadi  
Faculty of Animal Husbandry, Brawijaya University

O-08-5  POPULATION STRUCTURE AND PERFORMANCE OF PO CATTLE, CASE STUDY IN CITY OF PROBOLINGGO, EAST JAVA, INDONESIA  
Veronica Margareta Ani Nurgiartiningshi², Agus Budiarto¹, Suprih Bambang Siswijono¹, Retno Wandansari²  
¹University of Brawijaya Malang, ²Department of Agriculture Probolinggo
0-08-6  Improvement of Bali Cattle Performance by Additional Concentrate in Sumbawa Island, Indonesia
Luqman Hakim, Veronica Margareta Ani Nurgiartiningsih, Agus Budiarto
University of Brawijaya

0-08-7  Growth and Milk Production of Thai Milking Zebu Cattle
Krongkaew Borisutsawat, Mattaneeya Sarakul, Suudita Onsongchun, Danai Jattawa, Jirayut Khemswat, Thanathip Suwanasopee, Skorn Koonawoottrittirong
1 Bureau of Animal Husbandry and Genetic Improvement, Department of Livestock Development, 2 Department of Animal Science, Faculty of Agriculture, Kasetsart University, 3 Department of Animal Science, Faculty of Agriculture and Technology, Nakhon Phanom University

0-08-8  Genetic Polymorphism at Growth Hormone Receptor and Prolactin locus in Friesian Holstein Crossbred Cows
Sucik Maylinda, Tri Eko Susilorini
Brawijaya University

0-08-9  PHENOTYPE AND GENOTYPE CHARACTERISTIC OF FILIAL ETAWAH DAIRY GOAT
Tri Eko Susilorini
Brawijaya University

0-08-10 ROLE OF ARTIFICIAL INSEMINATION ON THE PROPAGATION OF IMPROVED BREEDS OF GOAT IN NORTHERN LUZON, PHILIPPINES
Jonathan Nayga, Aubrey Joy Balbin
Isabela State University Echague, Philippines

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Oral Session 09: Livestock Economics (1)
Tuesday, 23 August 14:30-16:30 Room N203

Chairs: Shiu Yin Leu, Livestock Research Institute, COA, Executive Yuan.
Nurtini Sudi, Faculty of Animal Science, Universitas Gadjah Mada
Charoensook Rangsun, Naresuan University

0-09-1 FACTORS INFLUENCE ON SMALLHOLDER DAIRY FARMING INCOME (Case Study in Malang, Indonesia)
Hari Utami, Sapti Maining, Ainun Seruni
Brawijaya University

0-09-2 EFFECT OF HUMAN CAPITAL AND PRICE LEVEL PERIOD ON THE BROILER FARMER INCOME IN SURAKARTA INDONESIA
Nurtini Sudi, Haryadi Trisakti, Jafendi Hasoloan Purba Sidadolog, Abdul Hakim
Faculty of Animal Science, Universitas Gadjah Mada Indonesia

0-09-3 THE DETERMINATION OF BUSINESS SCALE OF COW FARMERS USING BREAK EVEN POINT ANALYSIS IN KEBAR DISTRICT OF WEST PAPUA PROVINCE
Trisiwi Wahyu Widayati, Andoyo Supriyantono, Onesimus Yoku, Iriani Sumpe
Papua University

0-09-4 Indigenous Chicken and Fighting Cock Production Systems in Thailand
Rangsun Charoensook, Sonthaya Numthuam, Tossaporn Incharoen, Wandee Tartrakoon, Attachai Kewsri
Naresuan University, Faculty of Agriculture, Natural Resources and Environment
O-09-5 Cutting Costs and Retail Cuts Incomes in Holstein Bull Carcasses
Hasan Cicek¹, Murat Tandogan¹, Recep Kara²
¹Afyon Kocatepe University, Faculty of Veterinary Medicine Department of Animal Health Economics and Management,
²Afyon Kocatepe University, Faculty of Veterinary Medicine, Department of Food Hygiene and Technology

O-09-6 PERSPECTIVE OF ORGANIC FEED MATERIAL AVAILABILITY AS A MAIN COMPONENTS IN THE BROILER FEED AT MALANG REGENC
Adi Sutanto, WAhyu Widodo, Imbang Dwi Rahayu
University of Muhammadiyah Malang

O-09-7 A Comparison of Cattle Fattening System With and Without Credit in Two Districts in East Java, Indonesia
I Gusti Ayu Putu Mahendi¹,², Scott Waldron¹, Malcolm Wegener¹, R. A. Cramb¹
¹Indonesian Centre for Animal Research and Development, Bogor Indonesia,
²The School of Agriculture and Food Science, University of Queensland, Australia

O-09-8 AN INVESTIGATION OF ENTREPRENEURIAL ORIENTATION TO IMPROVE COMPETITIVENESS OF BEEF CATTLE FARMING IN KEBUMEN DISTRICT, INDONESIA
Mochamad Sugianto
Jenderal Soedirman University

O-09-9 Decreases of milk yield after conception of mature dairy cattle in tropical environment
Kanokwan Noikhrua, Wassana Chaisri, Paramintra Vinitchaikul, Wittaya Suriyasathaporn
Chiang Mai University

O-09-10 PIGS DEVELOPMENT ANALYSIS AND TECNOLOGIES INTRODUCTION IN THE VILLAGE OF TEMPOK
FIETJE S.G Oley, A H S Salendu, FH Elly
Faculty of Animal Husbandry University of Sam Ratulangi

Oral Session 10: Animal Reproduction (1)
Tuesday, 23 August 14:30-16:30 Room N301

Chairs: Takeshi Osawa University of Miyazaki
Trinil Susilawati Animal Husbandry Faculty of Brawijaya University, Indonesia
Rungroekrit Umaporn Faculty of Veterinary Medicine, Mahanakorn University of Technology
Tomohiro Sasanami Shizuoka University

O-10-1 REPRODUCTIVE PERFORMANCES OF HOLSTEIN FRIESIAN HEIFERS AND COWS INSEMINATED WITH SEXED SEMEN
Buddhi Chamara Kalansooriya¹,², H M Gayani Priyadarshani Herath¹
¹Department of Livestock Production, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, Sri Lanka,
²New Zealand Farm, Sri Lanka

O-10-2 Bovine oviducts express higher macrophage migration inhibitory factor on the post-ovulation phase than on the estrous and corpus luteum phases
Nahar Asrafun, Hiroya Kadokawa
Yamaguchi University Faculty of Veterinary Medicine

O-10-3 Gas Sensors For Electronic Nose And Their Application To Determine Estrus Phase In Cattle.
Pudji Astuti, Claude Mona Airin, Slamet Widiyanto
Faculty of Veterinary Medicine, Universitas Gadjah Mada, Indonesia
0-10-4  EFFECTS OF FEED SUPPLEMENT ON THE ARTIFICIAL INSEMINATION EFFICIENCY OF BEEF COWS UNDER SMALL FARMS CONDITION IN INDONESIA
A. Latief Toleng1, Muhammad Yusuf2, Surya Darma3
1Hasanuddin University, Indonesia, 2 Department of Livestock Services, Indonesia

0-10-5  SPERM FERTILITY DIFFERENCES ONGOLE CROSSBRED CATTLE IN EGG YOLK TRIS AMINOMETHAN AND EGG YOLK CAUDA EPIDIDYMIS DILUTERS DURING COOLING PROCESS
Trinil Susilawati, Nolasco DaCosta, Nurul Isnaini, M Nur Ihsan, Priyo Sugeng Winarto, Aulia Puspita Anugra Yeki	Animal Husbandry Faculty of Brawijaya University Indonesia

0-10-6  Potential of Evaporative System Improving Pregnancy Rate in Recipient Heifers after Embryo Transfers in Thailand
Umaporn Rungroekrit, Jatuporn Kajaysri  Clinic for Obstetrics Gynecology Andrology and Artificial Insemination of Domestic Animals, Faculty of Veterinary Medicine, Mahanakorn University of Technology, Thailand

0-10-7  Factor affecting sperm uptake into the sperm storage tubules in Japanese quail (Coturnix japonica)
Tomohiro Sasanami1,2, Mei Matsuzaki1,2, Shusei Mizushima3
1Shizuoka University, 2 Gifu University, 3 University of Toyama

0-10-8  Effect of Mangosteen (Garcinia mangostana) Pericarp Filtrate in Skim Milk Diluter on Bali Bull Diluted Semen Quality at room temperature
Nurul Isnaini, Trinil Susilawati, Aulia Puspita Anugra Yeki  Animal Husbandry Faculty of Brawijaya University Indonesia

0-10-9  The Quality of Chilled Semen Ongole Crossbred Cattle with the Replacement of Source Albumin in Cauda Epididyymal Plasma-2 Diluter
Aulia Puspita Anugra Yeki1, Enike Dwi Kusumawati2, Nisaus Sholikah1, Muchamad Luthfi3, Lukman Affandhy1, Dicky Pamungkas3, Kuswati Kuswati1, Aswah Ridhowi1, Herni Sudarwati3, Nurul Isnaini1, Trinil Susilawati1
1 Animal Husbandry Faculty of Brawijaya University, Indonesia, 2 Animal Husbandry Faculty of Kanjuruhan University, Indonesia, 3 Beef Cattle Research Station, Pasuruan Indonesia

0-10-10  Association between number of follicles at the onset of Shortsynch and fertility in Japanese Black cows
Takeshi Osawa1, Masashi Tanaka1, Yuji Tsubakishita1, Takashi Ekawa1, Koichiro Hemmi2, Ikuo Kobayashi2, Mizuho Uematsu3, Go Kitahara1
1 Laboratory of Theriogenology, University of Miyazaki, 2 Sumiyoshi Livestock Science Station, University of Miyazaki, 3 Department of Production Medicine, NOSAI Miyazaki

Oral Session 11: Animal Nutrition (Ruminants) (1)
Tuesday, 23 August 14:30-16:30 Room N302

0-11-1  Effect of Kaempferia galanga L. on in vitro nutrients digestibility, ruminal fermentation and methane production
Asih Kurniwati1,2, Widodo1, Wayan T Artama2, Lies Mira Yusianti1
1 Faculty of Animal Science Universitas Gadjah Mada, 2 Faculty of Veterinary, Universitas Gadjah Mada
O-11-2 EVALUATION ON INNOCULUM OF CYTOPHAGA Sp AS PROBIOTIC IN RUMINANT BY IN VITRO GAS PRODUCTION APPROACH
Indah Prihartini
Faculty of Agriculture and Animal Husbandry, University of Muhammadiyah Malang

O-11-3 The Effect of Rejected Soybean Supplementation with Different Treatments on Onggole Crossbred Cattle Feed
Bambang Suhartanto¹, Ristianto Utomo¹, Satria Budi Kusuma¹, Dian Astuti²
¹Faculty of Animal Science, Gadjah Mada University; ²Center of Agrotechnology Innovation, Gadjah Mada University

O-11-4 Effects of nitrate, extracted chitosan or shrimp shell meal on degradability and In Vitro gas production
Thao Nguyen The¹,², Metha Wanapat¹
¹Department of Animal Science and Veterinary Medicine, Faculty of Agriculture and Natural Resources, An Giang University, Vietnam; ²Tropical Feed Resources Research and Development Center (TROFREC), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand

O-11-5 Existing Feed Balance in Mixed Farming Systems in an Agricultural City of Probolinggo in East Java of Indonesia
Ifar Subagijo¹,², Veronica Margareta Ani Nurgiartiningsih³, Suprih Bambang Siswijono³, Mashudi Mashudi¹
¹University of Brawijaya

O-11-6 METAGENOMIC ANALYSES OF RUMEN FIBROLYTIC BACTERIA SWAMP BUFFALO
Anjas Asmara Samsudin¹,², Maisara Amin¹, Teck Chwen Loh¹,²
¹Department of Animal Science, Faculty of Agriculture, Universiti Putra Malaysia, Malaysia; ²Institute of Tropical Agriculture, Universiti Putra Malaysia, Malaysia

O-11-7 The Characteristic of Microencapsulation of Sesame Oil with Different Coating Materials and its effect on in vitro rumen fermentation
Sri Suharti, Farisa Diftairani, Raden Noviani, Asep Sudarman, Suryahadi Suryahadi
Department of Nutrition and Feed Technology, Faculty of Animal Science, Bogor Agriculture University

O-11-8 Bacterial communities of milk and cow shed samples in relation to changes of the somatic cell count
Haoming Wu¹, Yusuke Sugimoto², Yuji Tanabe², Takeshi Turuda¹, Naoki Nishino¹
¹Okayama University; ²Okayama Livestock Research Institute

O-11-9 THE EFFECT OF HARVESTING INTERVAL ON NUTRITIVE VALUE OF DWARF ELEPHANT GRASS (Pennisetum purpureum CV Mott)
Artharini Irsyamawati
Animal Husbandry Faculty Brawijaya University

O-11-10 Somatic embryogenesis and regeneration of Brachiaria decumbens from immature inflorescences
Nilo Suseno¹, Fitria Gemma Tyasari¹, Rani Agustina², Bambang Suwignyo¹, Bambang Suhartanto¹, Nafiatul Umami¹
¹Dept. of Animal Nutrition Faculty of Animal Science Gadjah Mada University Indonesia; ²Dept. of Agronomy Faculty of Agriculture Gadjah Mada University Indonesia
### Oral Session 12: Animal Nutrition (Non-Ruminants) (3)

**Chairs:** Sung Woo Kim (North Carolina State University)  
Mandey Jet Saartje (Faculty of animal husbandry University of Sam Ratulangi)

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<th>Session</th>
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| O-12-1  | The effects of dietary spirulina (Spirulina platensis) on growth performance, skin color and nutritional digestibility in Thai native chicken | Buaream Maneewan¹, Tonglian Buwjoom¹, Koh-en Yamauchi² | 1 Faculty of Animal Science and Technology, Maejo University, Thailand,  
2 Faculty of Agriculture, Kagawa University, Japan |
| O-12-2  | Effect of Palm Oil and Free Fatty Acid Substitution in Diets on Growth Performance and Carcass Yield of Broilers | Pitsiree Sirimart, Chaiyapoom Bunchasak, Choawit Rakangthong, Theerawit Poeikhampha | Kasetsart University |
| O-12-3  | COMPARISON OF NUTRITION CONTENT OF ORGANIC FEED FROM VARIOUS AREAS IN EAST JAVA AS POTENTIAL EXPLORATION OF LOCAL POULTRY FEED | Wahyu Widodo, Imbang Dwi Rahayu, Adi Sutanto | 1 University of Muhammadiyah Malang |
| O-12-4  | THE EFFECT OF USING OF FERMENTATION ORGANIC FEED ON KAMPONG CHICKEN HEALTH STATUS | Imbang Dwi Rahayu, Adi Sutanto, Wahyu Widodo | University of Muhammadiyah Malang |
| O-12-5  | High acid value rendering oil can replace soybean oil in broiler feeds | Cheng-Wei Wang¹, Kuo-Lung Ku², Cheng-Yang Chuang², Kuo-Lung Chen¹ | 1 Department of Animal science, National Chiayi University, Taiwan,  
2 Department of Applied Chemistry, National Chiayi University, Taiwan |
| O-12-6  | Comparative the Dietary Protein and Energy Basis in Feed Formulation on Production Performance and Carcass Yield of broilers | Suwipa Buttarach, Chaiyapoom Bunchasuk, Kanokporn Pourngpong, Theerawit Poeikhampha | Kasetsart University |
| O-12-7  | Effect of Nutrient Density and Phytase Supplementation in Diets on Growth Performance, Carcass Yield and Bone Condition of Broilers | Wararat Arparjirasakul, Chaiyapoom Bunchasuk, Choawit Rakangtong, Theerawit Poeikhampha | Kasetsart University |
| O-12-9  | Improving broiler growth performance through dietary supplementation with Aspergillus niger-fermented wheat bran | Ming-Tsung Chen¹, Ya-Wen Kang¹, Tsang-Chyi Shiah², Kuo-Lung Chen¹ | 1 Department of Animal Science of National Chiayi University,  
2 Department of Wood Based Materials and Design of National Chiayi University  |
| O-12-10 | Effect of Folic Acid and Docosahexaenoic Acid (DHA) Supplementation in diet and Incorporation in Egg of Laying Hens | Nuttawut Krutthai¹, Chaiyapoom Bunchasak², Naruemol Sangsawang², Wiriya Loongyai³, Chanwit Kaewtapede², Theerawit Poeikhampha¹ | 1 Department of Agricultural Technology and Development, Faculty of Agricultural Technology, Chiang Mai Rajabhat University, Thailand,  
2 Department of Animal Science, Faculty of Agriculture, Kasetsart University, Thailand  |
Oral Session 13: Focus Session Animal Nutrition (Non-Ruminants) (2)

Tuesday, 23 August 17:00-19:00 Room N201

**Chairs:** Eko Widodo
University of Brawijaya
Ahmad Mohammad Abdel Mageed
Faculty of Science, Minia University, Egypt

**0-13-1** Effects of plant soot on the growth performance, immunological indices, intestinal morphology and microflora in weaned piglets
Li Qi Wang, Bing Dong, Lin Zhu, Chucai Peng, Limin Gong
China Agricultural University

**0-13-2** Responses in colostrum production and immunoglobulin concentrations to conjugated linoleic acid fed to multiparous sows during late gestation
Fei Wu¹, Peili Li¹, Lili Bai¹, Hu Liu¹, Changhua Lai¹, Philip Thacker², Fenglai Wang¹
¹State Key Laboratory of Animal Nutrition, Ministry of Agriculture Feed Industry Centre, China Agricultural University, China,
²Department of Animal and Poultry Science, University of Saskatchewan, Canada

**0-13-3** Effect of long-term feeding of n-6 to n-3 fatty acid ratio in laying hen diets on yolk fatty acid accumulation
Thanan Yaemphet, Wittawat Molee, Sutisa Khempaka
Suranaree University of Technology

**0-13-4** EFFECTS OF SUPPLEMENTING PIG DIETS WITH DIETARY IRON LEVELS, TRYPTOPHAN AND PYRIDOXINE ON PERFORMANCE OF WEANING PIGLETS
WANTAMAS JANTASIN¹, LIANG CHOU HSIA²
¹Faculty of Animal Science and Technology, Maejo University, Thailand,
²Department of Tropical Agriculture and International Cooperation, National Pingtung University of Science and Technology, Taiwan (ROC)

**0-13-5** Effect of Different Fat Types With or Without Emulsifier on Growth Performance and Meat Quality in Broiler Chicken
Nur Fadzmira Huda Mohd Faudzi¹, Teck Chwen Loh¹², Henny Akit¹
¹Department of Animal Science, Faculty of Agriculture, University of Putra Malaysia,
²Institute of Tropical Agriculture, Universiti Putra Malaysia, Malaysia

**0-13-6** Tannin Is a Key Negative Factor in Determination and Prediction of Energy Content in Sorghum Grains for Growing Pigs
Long Pan, Ping Li, Xiaokang Ma, Yetong Xu, Qiuyu Tian, Ling Liu, Defa Li, Xiangshu Piao
State Key Laboratory of Animal Nutrition, Ministry of Agriculture Feed Industry Centre, China Agricultural University

**0-13-7** Effects of Tetrabasic Zinc Chloride on the Performance, Diarrhea Incidence, Antioxidant Capacity, Intestinal Morphology and Fermentation Profile of Weaned Piglets
Tian Xia, Weningqin Lai, Yiqiang Chen, Miaomiao Han, Jumei Xie, Limin Gong, Liying Zhang
State Key Laboratory of Animal Nutrition, Ministry of Agriculture Feed Industry Centre, China Agriculture University

**0-13-8** Effects of Deoxynivalenol on Cell Proliferation, Apoptotic Lesion and DNA Damage in Spleen of Taiwan Country Chickens
Stephanie S. Chen, Mei-Fong Lin
National Taiwan University

**0-13-9** Effects of replacement of dietary fish meal by fermented meat-and-bone meal on growth performance of broilers
Yi-Tai Hsu, Kuo-Lung Chen
Department of Animal Science, National Chiayi University, Taiwan
0-13-10 EFFECT OF INCREASING LEVELS OF HYDROLYZED PEPTONE IN EARLY CHICK DIETS ON PRODUCTION PERFORMANCE, EXCRETA QUALITY AND DIET ECONOMICS
Marie Fe M. Iranzo, Jeff C. Ebio, Krystalene S. Decena, Rommel C. Sulabo
Animal Nutrition Division, Animal and Dairy Sciences Cluster, University of the Philippines Los Baños, Philippines

Oral Session 14: Animal Breeding (2)
Tuesday, 23 August 17:00-19:00 Room N202

Chairs: Takdir Saili, Yoshitaka Nagamine, Lumatauw Sintje
Universitas Halu Oleo, Indonesia

0-14-1 Characteristics of Egg Production, Fertility and Hatchability of F1 Local Village Chicken Cross in Southeast Sulawesi, Indonesia
Takdir Saili, Syam Rahadi, Amrullah Pagala, Rusli Badaruddin, La Ode Nafiu, Ali Bain
Universitas Halu Oleo, Indonesia

0-14-2 ALLELIC FREQUENCY OF 24-BP INDEL (INSERTION-DELETION) IN PROMOTER PROLACTIN GENE OF PAPUA LOCAL CHICKENS
Sintje Lumatauw, M. Affan Mu’in
University of Papua

0-14-3 Genetic parameters of Body Weight Gain and Growth Curve Parameter Traits in Korean Native Chicken
Manjula Prabuddha, Hee-Bok Park, Dong-Won Seo, Nu-Ri Choi, Shil Jin, Sung Jin Ahn,
Jun-Heon Lee
1 Division of Animal and Dairy Science, Chungnam National University, Korea,
2 Department of Information Statistics, RINS, Gyeongsang National University, Korea

0-14-4 The effect of GH gene and IGF-I gene on dominant effect of bodyweight of Korat chicken
Kaewnakian Porntiwa, Petladda Kuadsantia, Rujjira Bunnom, Pongchan Na-Lampang,
Surintorn Boonanuntanasam, Amonrat Molee
School of Animal Production Technology, Institute of Agricultural Technology, Suranaree University of Technology

0-14-5 Variance Components and Heritability Estimates on Carcass Traits in Betong Chicken (KU Line)
Panatda Bungsrisawat, Sornthep Tumwasorn, Wiriya Loongyai, Sasitorn Nakhong,
Panwadee Sopannarath
1 Division of Animal Science, Faculty of Agriculture, Kasetsart University, THAILAND,
2 Department of Animal Science, Faculty of Agriculture at Kamphaeng Sean, Kasetsart University, Kamphaeng Saen Campus, THAILAND

0-14-6 Relationship between eggshell strength and egg shape in White Leghorns
Yoshitaka Nagamine, Yoko Suzuki, Olivier Gervais, Keijiro Nirasawa
1 Nihon University, 2 Kyoto University, 3 NARO Institute of Livestock and Grassland Science

0-14-7 COMBINING ABILITY OF GROWTH TRAITS IN BLACK-BONE (BLACK-BONE HMONG, BLACK-BONE CHINESE) AND THAI NATIVE CHICKENS (PRADU-HANG DAM)
PIRIYAPORN SUNGKHAPEECHA, Monchai Duangjinda, Banyat Laopaiboon, Wuttigrai Boonkum
1 Research and development network center for animal breeding (native chicken), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand,
2 Graduate school, Khon Kaen University, Thailand

0-14-8 Estimation of Growth Curve Parameters in Betong Chicken (KU Lines)
Panwadee Sopannarath, Arraya Jeanmas
1 Department of Animal Science, Faculty of Agriculture, Kasetsart University, Thailand,
2 Faculty of Science and Technology, Prince of Songkla University, Pattani campus, Thailand
0-14-9 Effect of housing system on expression of antioxidant enzyme and heat stress genes in commercial native chicken
Natthaya Duanghaklang¹, Monchai Duangjinda¹,², Kanop Sujikara¹, Banyat Laopaiboon², Yupin Phasuk¹,²
¹Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand,
²Research and Development Network Center for Animal breeding (Native Chicken), Khon Kaen University, Thailand,
³Taoosree Thai Chicken Co., Ltd., Thailand

0-14-10 Cholesterol of Black-Bone, Thai Native and Their Crossbreds Chickens
Sukanya Charoensin¹, Banyat Laopaiboon², Wuttigrai Boonkum¹,², Sajee Kanharaoeng¹,²,
Pitcharut Sanchaisuriya¹,², Monchai Duangjinda¹,²
¹Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand,
²Research and Development Network Center for Animal Breeding (Native Chicken), Khon Kaen University, Thailand

Oral Session 15: Livestock Economics (2) / Poultry Science & Industry
Tuesday, 23 August 17:00-19:00 Room N203
Chair: Widiati Rini  Faculty of Animal Science Universitas Gadjah Mada

0-15-1 The performance of livestock extension agent in empowerment of farmers at Pinrang Regency, South Sulawesi, Indonesia
AGUSTINA ABDULLAH
Department of Sosio-Economic of Animal Science, Hasanuddin University, Indonesia

0-15-2 PRODUCTION SYSTEMS AND INCOME GENERATION FROM THE BLIGON GOAT FARMING IN THE RURAL COMMUNITY IN GUNUNGKIDUL OF YOGYAKARTA PROVINCE, INDONESIA
Rini Widiati
Faculty of Animal Science, Universitas Gadjah Mada

0-15-3 COMMUNICATION FLOWS AND ADOPTION OF INNOVATION IN GOAT FARMING, PURWOREJO, INDONESIA
Budi Guntoro¹, Subejo², Wahyudi³
¹Universitas Gadjah Mada Faculty of Animal Science, ²Universitas Gadjah Mada Faculty of Agriculture,
³Office of Agriculture, Livestock and Fishery, Regency of Purworejo

Mujtahidah Anggriani Ummul Muzayyanah, Suci Paramitasari Syahlan, Rini Widiati
Faculty of Animal Science, Universitas Gadjah Mada

0-15-5 The Analysis of Cost and Benefit of the Managerial Accounting on the Dairy Goat Farms in Taiwan(2012,10~2013,9)
Shiu yin Leu
Management Division Livestock Research Institute, COA, Executive Yuan.

0-15-6 DECREASING BLOOD LIPID PROFILE AND INCREASING WELFARE ON DUCKS WITH PHYTOBIOICS SUPPLEMENTATION IN THE DIET
Ismoyowati Ismoyowati, Mochamad Mufti
Universitas Jenderal Soedirman

0-15-7 Reproductive Performance and Expression of Mucin in the Lower Segment of Oviduct Between Indonesian Native Naked-Neck and Normal Feathered Chicken
Bambang Ariyadi, Jafendi Sidadolog, Sri Harimurti, Sri Sudaryati, Wihandoyo Wihandoyo, Heru Sasonko
Universitas Gadjah Mada
Effects of pine bark extract (flavangenol®) on heat shock protein expression in chicks
Hui Yang¹, Vishwajit S Chowdhury², Mohammad A Bahry³, Phuong V Tran¹, Phong H Do¹, Guofeng Han¹, Rong Zhang¹, Hideki Tagashira⁴, Masahito Tsubata⁴, Mitsuhiko Furuse¹

¹Laboratory of Regulation in Metabolism and Behavior, Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, Japan,
²Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University, Japan,
³Division of Endocrinology, Department of Medicine, Boston Children’s Hospital, Harvard Medical School, USA,
⁴Research and Development Division, Toyo Shinyaku Co., Ltd., Japan

COMPARATIVE STUDY OF NUTRITIONAL CONTENT AND PROTEIN PROFILE OF MALAYSIA EDIBLE BIRD NEST
STALIN JOEFREY¹, AINI IDERIS¹,³, INTAN SAFINAR ISMAIL⁵, FARIDAH ABAS⁵, JALILA ABU¹,³,
NORASFALIZA RAHMAD⁶, MOKRISH AJAT¹,², ROZAIHAN MANSOR¹,⁴

¹Centre of Excellence on Swiftlets, Faculty of Veterinary Medicine, Universiti Putra Malaysia,
²Department of Veterinary Preclinical Sciences, Faculty of Veterinary Medicine, Universiti Putra Malaysia,
³Department of Veterinary Clinical Studies, Faculty of Veterinary Medicine, Universiti Putra Malaysia,
⁴Department of Medicine and Surgery of Farm and Exotic Animal, Faculty of Veterinary Medicine, Universiti Putra Malaysia,
⁵Laboratory of Natural Products, Institute of Bioscience, Universiti Putra Malaysia,
⁶Agro-Biotechnolology Institute Malaysia, National Institutes of Biotechnology Malaysia, c/o MARDI Headquarters, Malaysia

The Effects of Red Onion Extract in the Pulmonary Histopathological Lesions of Layer Chickens At 47 Days Old
Riskyha Nataria
Gadjah Mada University

Oral Session 16: Animal Reproduction (2)
Tuesday, 23 August 17:00-19:00 Room N301

Chair: Junya Ito Azabu University

The Effect of Sexed Semen Methods Toward Motility and Ratio of X and Y Sperm Filial Ongole Cattle
Enike Dwi Kusumawati¹, Nurul Isnaini², Aulia Puspita Anugra Yekt³, Nisaus Sholikah³, Muchamad Luthfi³, Lukman Affandhy⁴, Dicky Pamungkas⁴, Kuswati², Aswah Ridhowi³, Herni Sudarwati³, Trinil Susilawati²

¹Animal Husbandry Faculty, Kanjuruhan University, Indonesia,
²Animal Husbandry Faculty, Brawijaya University, Indonesia,
³Student of Animal Husbandry Faculty, Brawijaya University, Indonesia,
⁴Beef Cattle Research Station, Indonesia

Effect of Post-Mortem Storage of Testicles on the Quality and Fertilizing Ability of Water Buffalo Epididymal Sperm
LERMA OCAMPO¹,², EDENEIL JEROME VALETE¹, EVARISTO ABELLA³, MARLON OCAMPO¹

¹Reproductive Biotechnology Unit, Philippine Carabao Center, National Headquarters and Gene Pool,
²Department of Biological Sciences, College of Arts and Sciences, Central Luzon State University

Calf Birth Weight and Post Partum Estrus Bali Cow Fed Complete Feed From Palm Oil Plantation in Central Borneo Indonesia
Mudhita Ida Ketut¹, Baliarti Endang², Priyono Sasmito Budhi Subur², Umami Nafiatul², Noviandi Cuk Tri², Kustono², Suparta Budisatria I Gede², Wattimena Jefferi³

¹Antakusuma University Faculty of Agriculture, ²Gadjah Mada University Faculty of Animal Science,
³Pattimura University Faculty of Agriculture
0-16-4 Milk Production of Sows Superovulated with PMSG and hCG Through Superovulation Before Mating
Mien Theodora Rossesthellinda Lapian¹, Pollung Siagian², Wasmien Manalu², Rudy Priyanto², Petrus Montong¹
¹Sam Ratulangi University, ²Bogor Institute of Agriculture

0-16-5 Effect of Sericin Supplementation on Motility and Plasma Membrane Integrity of Frozen-Thawed Dairy Cattle Bull Semen
Yotsapon Yangngam¹, Vibuntita Chankitisakul¹², Monchai Punprom¹, Saowaluk Suton³, Thevin Vongpralub¹²
¹Department of Animal Science, Faculty of Agriculture, KhonKaen University, Thailand, ²Thermo-tolerance Dairy Cattle Research Group, KhonKaen University, Thailand

0-16-6 Anti Bovine Pregnancy Associated Glycoprotein (anti-bPAG) 60kDa as Biomarker Candidate For Early Detection of Ruminant Pregnancy
Aulanniam Rifai¹, Min Rahmatilla¹, Sonnya Oktaviani Helina¹, Dyah Kinasih Wuragil¹, Agung Pramana Marhendra¹
¹Brawijaya University, Faculty of Veterinary Medicine, ²Brawijaya University, Faculty of Sciences

0-16-7 Effects of straws size on the quality of cryopreserved Thai native chicken semen
Pachara Thananurak¹, Napapach Chuaychu-noo¹, Pornjit Sornseeda², Saennamphung Somtaw³, Thevin Vongpralub³
¹Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand, ²Faculty of Agricultural and Technology, Nakhon Phanom University, Thailand, ³Research and Development Network Center for Animal Breeding (Native chicken), Faculty of Agriculture, Khon Kaen University, Thailand

0-16-8 Production and Reproductive Performance of Bali Cattle at Different Maintenance System
Woro Busono, Dwi Dedeh Kurniasari
Brawijaya University

0-16-9 Expression of prolactin and prolactin regulatory element binding protein in the anterior pituitary gland of chicken embryo and laying hens.
Norio Kansaku¹, Yasuko Tobari¹, Gen Hiyama¹, Naokazu Minoguchi², Masazumi Numata², Masatoshi Kino³, David Zadworny³
¹Azabu University, ²Aichi Agricultural Research Center, ³McGill University

0-16-10 Spermatozoal transcriptome analysis in boars with varying fertility reveals differential expression of genes related to metabolism, fertilisation and zygote development
Narayana H Mohan, P.P Gokuldas, Lipika Buragohain, Madan Kumar Tamuli, Dilip Kumar Sarma
ICAR-National Research Centre on Pig, India

Oral Session 17: Feeds & Feeding (Ruminants) (1)
Tuesday, 23 August 17:00-19:00 Room N302

Chairs: Toshiyoshi Ichinohe Shimane University
Yusuf Akhyar Sutaryono Faculty of Animal Science University of Mataram

0-17-1 Effect of Concentrate Feed Containing Fermented Pumpkin and Cassava On Growth Performance of Beef Cattle
Khanchai Danmek¹, Tosawat Anorach¹, Somchart Thana², Chayut Dongpaleedham³, Norakamol Laorodphand, Choke Sorachakura⁴
¹Program of Biotechnology, School of Agriculture and Natural Resources, University of Phayao, Thailand, ²Program of Animal Science, School of Agriculture and Natural Resources, University of Phayao, Thailand, ³Phayao Livestock Research Station, Department of livestock development, Thailand, ⁴Faculty of Food and Agricultural Technology, Pibulsongkram Rajabhat University, Thailand
The Survey of nutritive value of By-products from Oil palm that use for raise Beef Cattle
Sitthisak Jantarat, Thaintip Kraiprom, Narumon Sanajit
Prince of Songkla University

Microorganisms Composition of Tropical TMR's Silage Inoculated with Local Lactic Acid Bacteria
Ahmad Wahyudi1, Listiari Hendraningsih1, Dicky Pamungkas2, Roy Hendroko Setyobudi3
1Faculty of Agriculture and Animal Husbandry, Muhammadiyah Malang University, Indonesia,
2Institute of Beef Cattle Research, Indonesia,
3Sinarmas Agroresources and Technology Tbk, Indonesia

FORAGE GROWING AND HAY MAKING OF CLITORIA TERNATEA FOR DRY SEASON FEED SUPPLEMENT IN EAST NUSA TENGGARA, INDONESIA
Jacob Nulik, Debora Kana Hau
East Nusa Tenggara Assessment Institute for Agriculture Technology

Effect of temperature and underground storage of stem sections on emergence and establishment of nursery plants of dwarf Napier grass
Yasuyuki Ishii1, Yusuke Iki2, Satoru Fukagawa2, Sachiko Idota1
1Faculty of Agriculture, University of Miyazaki, 2Graduate School of Agriculture, University of Miyazaki,
3Nagasaki Agricultural and Forestry Technical Development Center

Fermentation characteristics of tropical grass using in vitro gas production technique
Chaowarit Mapato, Metha Wanapat
Tropical Feed Resources Research and Development Center (TROFREC), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand

Increasing Fattening Performance of Bali cattle by Improving Post Weaning Growth Through Supplementation with Sesbania grandiflora
Dahlanuddin Dahlanuddin1, Baq Tutik Yuliana1, Oscar Yanuariant1, Tanda Sahat Panjaitan2,
Michael Halliday2, Harry Max Shelton3
1Faculty of Animal Science University of Mataram, Indonesia,
2Assessment Institute for Agricultural Technology, Indonesia,
3School of Agriculture and Food Sciences, The University of Queensland, Australia

Study of Digestibility Value of Oil Palm By Product Ration and Its Effect on The Performance of Bali Cattle
Fariani Armina, Muslim Gatot, Wahyuni Dyah, Priyanto Langgeng, Abrar Arfan
Department of Animal Science, Agriculture Faculty of Sriwijaya University, Indonesia

Optimizing Rice Straw Utilization for Bali Cattle Fattening as Adaptation Strategy to Climate Change for Smallholder Farmers in Lombok Indonesia
Yusuf Akhyar Sutaryono1, Muhammad Ali1, Made Sriasih1, Muhammad Taufik Fauzi2
1Faculty of Animal Science University of Mataram, 2Faculty of Agriculture University of Mataram

Different level of vitamin in Calf Milk Replacer effect on calf blood parameters and calf development
Harumi Ono1, Akira Saito2, Tatsuhiro Matsuno1, Takeshi Hayashi1, Shuji Ueda1, Takeshi Baba1
1Fukuoka Agriculture and Forestry Research Center,
2Zen-Raku-Ren The National Federation Dairy Co-operative Association,
3Judicial Agricultural Union Kusunoki Dairy Farming production Association
The Effects of Using Corn with Various Phytic Acid in Diets on Performance, Phosphorus and Calcium Serum in Nursery Pigs

Pattaraporn Poommarin
Faculty of Animal Sciences and Agricultural Technology, Silpakorn University

Dietary fish oil regulates glucose and lipid metabolism genes via porcine peroxisome proliferator-activated receptor γ

Yu-Hsiang Yu
Department of Biotechnology and Animal Science, National Ilan University

Effect of feeding of noni fruit powder (Morinda citrifolia) based herbal supplement on production and meat quality in hybrid duck

David Kurniawan, Widodo Eko, Djunaidi Irfan H
Brawijaya University

Effects of Supplemental β-Mannanase to Provide Substrates for Binding to Aflatoxin in Feed on Growth and Health of Pigs

Sung Woo Kim, Kayla Leanne Brooks, Alexandra C. Weaver
North Carolina State University

Efficacy of Supplemental Bacteriophages on Growth and Gut Health of Pigs

Kayla Leanne Brooks, Sung Woo Kim
North Carolina State University

Identification of a possible probiotic Bacillus coagulans substrain that modulate the fecundity of the laying hen

Toshiyuki Ito¹,², Hirokuni Miyamoto¹,³,⁴, Wataru Suda¹,⁵, Shinji Fukuda¹,⁶, Ryo Watanabe¹,
Shota Yoshikawa¹, Hisashi Miyamoto¹, Hiroshi Ohno⁶, Masahira Hattori¹,², Hiroaki Kodama¹
¹Chiba University, ²Keiyo plant engineering Ltd., ³Keio University, ⁴Sermas Ltd., ⁵Tokyo University, ⁶RIKEN IMS,
²Waseda University

THE EFFECTS OF GROUND RAW ALEURITES MOLUCCANA L. (Willd) KERNEL ON PERFORMANCE OF LAYING HENS

Rohaida Abdul Rasid¹, Abd Razak Alimon²
¹Faculty of Sustainable Agriculture, University Malaysia Sabah, Malaysia,
²Faculty of Animal Husbandry, Universitas Gadjahmada, Indonesia

HAEMATOLOGICAL AND PERFORMANCE PARAMETERS OF BROILER SUPPLEMENTED BY Tinospora crispa L. Miers EXTRACT

Syam Rahadi¹, Astriana Napirah¹, La Malesi La Malesi¹, La Ode Arsyad Sani¹, Dian Agustina¹,
Natsir Sandiah¹, La Ode Baa¹, Rahman Rahman¹, Widhi Kurniawan¹, Ayu Utami Bakhtiar²,
Wa Ode Astriyani Sari²
¹Faculty of Animal Science, Universitas Halu Oleo, Kendari, ²Graduate of Faculty of Animal Science, Universitas Halu Oleo

Effects of Dietary Supplementation of Organic Cottonseed Meal Level on Meat Quality Characteristics of Slow-Growing Broilers Reared in Organic System

Kamil Kucukyilmaz¹,², Mehmet Bozkurt³, Mustafa Çınar², Erol Bintaş³, Mertcan Demircioğlu³
¹Department of Animal Science, Faculty of Agriculture, Eskisehir Osmangazi University, Eskisehir-Turkey,
²General Directorate of Research, Erbeyle Research Institute, Aydin-Turkey,
³Izmir Food Control Laboratory Directorate, Izmir-Turkey

SULFADIAZINE RESIDUE IN THE LIVER, BREAST MEAT, AND PERFORMANCE OF BROILER SUPPLEMENTED BY TURMERIC (Curcuma domestica Valet) MEAL

Rahman Rahman, La Ode Nafiu, Syam Rahadi, Deki Zulkarnain, Astriana Napirah
Faculty of Animal Science, Universitas Halu Oleo, Kendari
Day 3: Thursday, 25 August  [Kyushu Sangyo University]

Oral Session 19: Milk, Eggs and By-products

Thursday, 25 August  8:30-10:30  Room S207

**Chairs:** Peter Wynn  Charles Sturt University
Yelnetty Afriza  Faculty of Animal Husbandry University of Sam Ratulangi
Kensuke Arakawa  Okayama University

O-19-1 Evaluation of Lactic Acid Bacteria from Ettawah Crossbred Goat Milk as Probiotic
Nurliyani Nurliyani, Indratiningsih, Widodo
Dept. of Animal Product Technology, Faculty of Animal Science, Universitas Gadjah Mada

O-19-2 Characteristic and Emulsion Stability of Low Fat Mayonnaise Using Rice Bran Oil and Kefir
Herly Evanuarini¹, Nurliyani², Indratiningsih³, Pudji Hastuti³
¹ Animal Food Technology, Faculty of Animal Husbandry, Brawijaya University, Indonesia,
² Animal Product Technology, Faculty of Animal Science, Gadjah Mada University, Indonesia,
³ Agricultural Technology, Gadjah Mada University, Indonesia

O-19-3 Amoxicillin, ampicillin and penicillin residues in informal milk supply chains of Pakistan
Peter Wynn¹, Naveed Aslam¹, Muhammad Tipu², Mateen Abbas², Muhammad Ishaq², Sajid Latif²,
David McGill³, Hassan Warrich², Muhammad Husnain²
¹ Graham Centre for Agricultural Innovation, Charles Sturt University, Australia,
² Quality Operation Laboratory, University of Veterinary and Animal Sciences, Pakistan,
³ Faculty of Veterinary and Agricultural Sciences, University of Melbourne, Australia

O-19-4 Evaluation of Chemical Characteristic and Viability Microbial Of Kefir with Kolang–Kaling Fruit Addition as a Prebiotic
Afriza Yelnetty, Rahmawati Hadju, Arie Mirah, Nova Lontaan, Christina Junus
Sam Ratulangi University

O-19-5 Effect of various acids additions on the quality and digestibility of Ricotta cheese
Chung-Shiuan Wu, Mei-Jen Lin
National Pingtung University of Science and Technology

O-19-6 Effect of pretreatment of casein micelle on isolation of milk fat globule membrane from buttermilk by using microfiltration method
Tien-En Wei¹, YU-YI Chen¹, Yu-Hsuen Tseng¹, Tsai-Shin Wang¹, Yu-Chun Lin³, Yen-Po Chen¹
¹ Department of Animal Science, National Chung Hsing University

O-19-7 KEFIR QUALITIES OF GOAT MILK WHICH ADDED Lactobacillus plantarum AND BANANA PEEL FLOURS
INDRATININGSIH INDRATININGSIH
Faculty of Animal Science Universitas Gadjah Mada

O-19-8 Milk fermentation with peptide-requiring Lactobacillus gasseri using advance pepsinolysis
Kensuke Arakawa¹, Kanako Matsunaga¹, Ai Moritoki¹, Shuhei Takihoro¹, Soma Ryuto¹, Yasushi Kawai²,
Tetsuya Masuca³, Taku Miyamoto¹,³
¹ Graduate School of Environmental and Life Science, Okayama University,
² Graduate School of Bioresource Sciences, Nihon University,
³ Faculty of Food Culture, Kurashiki Sakuyo University

O-19-9 Isolation of nisin-producing Lactococcus lactis subsp. lactis strains from dadiah,
Minangkabau fermented buffalo milk in West Sumatra, Indonesia
Ade Sukma¹,², Kensuke Arakawa¹, Jafirinur², Hidetoshi Morita¹
¹  Graduate School of Environmental and Life Science, Okayama University,
² Faculty of Animal Husbandry, Andalas University

O-19-10 Characteristics of Lactic acid bacteria isolated from Chigee collected in Inner Mongolia
Yoshikazu Adachi, Maki Nakata
National Ibaraki University
**Oral Session 20: Feeds & Feeding (Non-Ruminants) (1)**

**Thursday, 25 August 8:30-10:30 Room N201**

**Chairs:** Shubash Chandra Das  
Bangladesh Agricultural University  
Marie Najoan  
Faculty of Animal Husbandry University of Sam Ratulangi

**O-20-1**  
**Effect of Eggshell Levels in Layer Diet on Productive Performance, Egg Quality and Plasma Calcium Concentration**  
Pornpan Saenphoom, Suphawadee Chimtong, Krittinya Lertchunhakiat, Manatsanan Nopparatmaitree  
Faculty of Animal Sciences and Agricultural Technology, Silpakorn University

**O-20-2**  
**Beneficial effect of AZOMITE® as a source of natural minerals on growth performance of broilers**  
Shubash Chandra Das  
Bangladesh Agricultural University

**O-20-3**  
**INCLUSION EFFECT OF MANGOSTEEN PEEL MEAL AS FEED ADDITIVE ON PERFORMANCES, CARCASS AND INTERNAL ORGANS OF MOJOSARI DUCK**  
Dini Hardini¹,¹, Irfan Djunaidi¹,¹, Edhy Soedjarwo¹  
¹Faculty of Animal Husbandry, Brawijaya University, Indonesia,  
²The Assessment Institute for Agricultural Technology, Indonesia

**O-20-4**  
**Use of Blue Swimming Crab Waste as Alternative Animal Feedstuff**  
Sunate Surbkar¹, Rawin Surbkar², Chanida Bupata¹, Sujinda Khunan¹, Supasan Sa-ngiamjit¹  
¹Faculty of Engineering and Agro-industry, Maejo University, Thailand,  
²Faculty of Science and Technology, Rajamangala University of Technology Tawan-ok, Thailand

**O-20-5**  
**EFFECT OF MULTI-CARBOHYDRASE ENZYME SUPPLEMENTATION AND ROUTE OF ADMINISTRATION ON BROILER GROWTH PERFORMANCE AND ENERGY VALUE OF CORN-SOYBEAN MEAL DIETS**  
Rudyard Marlowe O. Cruz, Rommel C. Sulabo  
Animal Nutrition Division, Animal and Dairy Sciences Cluster, University of the Philippines Los Baños, Philippines

**O-20-6**  
**UTILIZATION OF "GOROHO" BANANA STEM (Musa acuminafe,sp) MEAL AS AN ALTERNATIVE FEED ON BROILER PERFORMANCE**  
Marie Najoan, Betty Bagau, Florencia Sompie, Fenny Wolayan, Meity Imbar  
Faculty of Animal Husbandry University of Sam Ratulangi

**O-20-7**  
**THE EFFECTS OF INITIAL FEEDING AND DRINKING ON SMALL INTESTINE AND GROWTH PERFORMANCE OF NATIVE CHICKEN**  
Luluk Annayyir Aulia Kusumawardani, Meidina Inasa  
Universitas Gadjah Mada

**O-20-8**  
**Effects of Different Feed Processing Methods on Growth Performance in Broiler chickens**  
Jinsoo Kim, Abdolreza Hosseindoust, Suhyup Lee, Yohan Choi, Minju Kim, Alip Kumar, Seung min Oh, HyunBin Ham, Ill Kyong Kwon, Byung Jo Chae  
Kangwon National University

**O-20-9**  
**THE EFFECTS OF UTILIZATION OF DIFFERENT PROCESSING TECHNIQUES OF SKIPJACK BONE MEAL IN THE RATION ON EGG PRODUCTION OF QUAIL**  
Betty Bagau, Marie Najoan, Meity Imbar, Hengki Liwe, Florencia Sompie  
Faculty of Animal Husbandry University of Sam Ratulangi
Oral Session 21: Animal Breeding & Genetics

Thursday, 25 August 8:30-10:30 Room N202

Chairs: Vo Anh Khoa Do

Can Tho University

Sri Rachma Aprilita Bugiwati

HASANUDDIN UNIVERSITY

0-21-1 Effects of porcine C8a-b polymorphisms on hemolytic complement activity

Vo Anh Khoa Do¹, Edudard Murani², Siriluck Ponsuksili³, Ronald Brunner¹, Thi Dieu Thuy Nguyen³, Klaus Wimmers¹

¹ Can Tho University, ² Institute for Genome Biology at the Leibniz Institute for Farm Animal Biology,
³ Vietnam Academy of Science and Technology

0-21-2 Genome Wide Association Study of Oleic Fatty Acid in Duroc Swine

Vanessa Viterbo¹,², Bryan Irvine Lopez¹, Taehun Kim¹, Kang Seok Seo¹, Hyunsung Kang¹, Choulwon Song¹

¹ Suncheon National University, ² Central Luzon State University

0-21-3 A genetic association study for the lung lesion scores of mycoplasma pneumonia in pigs

Toshihiro Okamura¹,², Hiroshi Kadowaki¹, Chihiro Shibata¹, Eisaku Suzuki¹, Ayumi Mikawa¹, Toshimi Matsumoto¹, Hirohide Uenishi¹, Osamu Sasaki¹, Keiichi Suzuki¹, Masahiro Satoh¹

¹ Institute of Livestock and Grassland Science, NARO, ² Graduate School of Agricultural Science, Tohoku University,
³ Miyagi Livestock Experimental Station,
⁴ JATAFF-Institute, Japan Association for Techno-Innovation of Agriculture, Forestry and Fisheries,
⁵ Institute of Crop Science, NARO, ⁶ Institute of Agrobiological Sciences, NARO

0-21-4 GENETIC DIVERSITY AND GENETIC STRUCTURE OF FORMOSAN PANGOLIN (MANIS PENTADACTYLA PENTADACTYLA) IN TAIWAN BASED ON MHC AND MICROSATELLITE MARKERS

Jin-Ting Liu¹, Fang-Yu Lai¹, En-Chung Lin¹, Yu-Hsuan Wu¹, Hsien-Shao Tsao¹, Shih-Chien Chin², Pei-Hwa Wang¹

¹ Department of Animal Science and Technology, National Taiwan University, ² Taipei Zoo

0-21-5 Estimation of Growth Curve Parameter in Japanese Quail

Arraya Jeanmas

Faculty of Science and Technology, Prince of Songkla University, Pattani campus, Thailand

0-21-6 CROWING CHARACTER OF GAGA’ CHICKEN AS LONG CROWER OF NATIVE CHICKEN BREED OF INDONESIA

SRI RACHMA APRILITA BUGIWATI, MUHAMMAD IHSAN ANDI DAGONG, FACHRI ASHARI

HASANUDDIN UNIVERSITY - INDONESIA

0-21-7 THE GENETIC DIVERSITY OF Mx|Hpy81 GENES IN NATIVE CHICKENS USING PCR-RFLP TECHNIQUE

Muhammad Amrullah Pagala, Saili Takdir

Halu Oleo University

0-21-8 Fate determination of skeletal muscle-derived mesenchymal stem cells into myogenic and adipogenic lineage

Wenjuan Sun, Ting He, Chunfu Qin, Kai Qiu, Xin Zhang, Yanhong Luo, Defa Li, Jingdong Yin

State Key Lab of Animal Nutrition, College of Animal Science and Biotechnology, China Agricultural University

0-21-9 Assessment of genetic diversity in Agu pig population by estimates of coancestry coefficient based on genome-wide approach

Arakawa Aisaku¹, Shihei Touma², Masaaki Taniguchi¹, Tomoko Eguchi-Ogawa¹, Hirohide Uenishi³, Satoshi Mikawa¹

¹ Institute of Livestock and Grassland Science, NARO,
² Okinawa Prefectural Livestock and Grassland Research Center, ³ Institute of Agrobiological Sciences, NARO
Genetic diversity and relationship for Vietnamese native pigs using genome wide SNP markers

Shinya Ishihara, Aisaku Arakawa, Masaaki Taniguchi, Minh Luu Quang, Lan Pham Doan, Ba Nguyen Van, Satoshi Mikawa, Thu Nhu Van, Kazuhiro Kikuchi

1 Institute of Agrobiological Sciences, NARO, Japan, 2 Institute of Livestock and Grassland Science, NARO, Japan, 3 National Institute of Animal Science, Vietnam

Oral Session 22: Poultry Science & Industry (1)

Thursday, 25 August 8:30-10:30 Room N203

Chairs: Mongkol Thepparat, Rajabhat Songkhla University
      Dono Nanung Danar, Universitas Gadjah Mada
      Kawahara-Miki Ryouka, Tokyo University of Agriculture

0-22-1 DIETARY SUBSTITUTION OF SOYBEAN MEAL WITH SOY-MILK WASTE: EFFECTS ON GROWTH PERFORMANCE AND PHYSICAL MEAT QUALITY IN BROILER CHICKENS

Nanung Danar Dono, Supadmo Supadmo, Edwin Indarto, Soeparno Soeparno

Universitas Gadjah Mada, Faculty of Animal Science

0-22-2 Genetic features of red and green junglefowls and relationship with Indonesian native chickens Sumatera and Kedu Hitam

Ryouka Kawahara-Miki, Maria Ulfa, Achmad Farajaillah, Muladno Muladno, Ben Dorshorst, Alison Martin, Tomohiro Kono

1 NODAI Genome Research Center, Tokyo University of Agriculture, 2 Department of Animal Production and Technology, Faculty of Animal Science, Bogor Agricultural University (IPB), 3 Department of Biology, Faculty of Mathematics and Natural Science, Bogor Agricultural University (IPB), 4 Department of Animal and Poultry Sciences, Virginia Tech, 5 The Livestock Conservancy, 6 Department of Bioscience, Tokyo University of Agriculture

0-22-3 The Influence of Feed And Water Added Into Broiler Excreta on The Growth Of House Fly Larvae (Musca Domestica L)

Wihandoyo Wihandoyo, Ahmad Ferdian, Rahmad Saleh Hasibuan

Faculty of Animal Science GMU

0-22-4 The Effect of Lighting Regimens on Broiler Growth:1. On the Productive Performance

Sri Sudaryati, Muhammad Mauludin, Sri Harimurti, Bambang Ariyadi, Wihandoyo Wihandoyo, Heru Sasongko

Universitas Gadjah Mada

0-22-5 The Effect of Lighting Regimens on Broiler Growth:2. On Weekly T3 and T4 Concentration

Muhammad Mauludin, Sri Harimurti, Sri Sudaryati, Bambang Ariyadi, Wihandoyo Wihandoyo, Heru Sasongko

Universitas Gadjah Mada

0-22-6 EFFECT OF PHYTASE, CELLULASE AND RICE HULL SUPPLEMENTATION IN COMMERCIAL BROILER DIETS ON PERFORMANCE, INTESTINAL PH, AND CAECAL VFA

Sri Hartini, Purwaningsih Purwaningsih

Papua University Department of Animal Husbandry

0-22-7 IMPACT OF PRE-COLD ROOM STORAGE ON HATCHARY PERFORMANCES

Jagath Munasinghe, Shan Karnanayaka, Tilini Disanayaka, Gayani Herath, Priyantha Kumara

1 Sabaragamuwa University of Sri Lanka, Department of Livestock Production, 2 New Anthoney’s Farms (Pvt) Ltd.
0-22-8 THE EFFECT OF SUPPLEMENTATION OF LIGNOCHLORITIC BACTERIA ISOLATES TO BROILER CHICKENS’ PRODUCTIVITY, MEAT QUALITY, AND HEALTH
Lili Zalizar
Faculty of Agriculture and Animal Husbandry, University of Muhammadiyah Malang

0-22-9 BROILER FARMING IN TAIWAN: ON-FARM SURVEY IN HUALIEN COUNTY
Chia-Jung Hsieh
Hualien Animal Propagation Station, Livestock Research Institute, Council of Agriculture, Executive Yuan, Taiwan

0-22-10 The application of the mixture consisting of sesame meal and chicken blood by fermentation to broiler feed
Yu-Hsuan Ting, Yi-Cheng Lee, Chian-Kai Chang, Hen-Wei Wei
1Department of animal science and technology, National Taiwan University, 2 Li Han Enterprise Corporation Limited

Oral Session 23: Animal Physiology & Anatomy
Thursday, 25 August 8:30-10:30 Room N204

Chairs: Motoi Kikusato Tohoku University
Aiko ISHIDA NARO
Kazuki Nakashima NARO

0-23-1 Oral administration of the medium containing live D-aspartate producing bacteria enriched with D-asparate declines rectal temperature in chicks
Phong H Do, Phuong V Tran, Mohammad A Bahry, Hui Yang, Guofeng Han, Asami Tsuchiya, Yukio Asami, Mitsuhiro Furuse, Vishwajit S Chowdhury
1 Laboratory of Regulation in Metabolism and Behavior, Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, Japan,
2 Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University, Japan,
3 R&D Division, Meiji Co., Ltd., Japan

0-23-2 Influence of brain amino acids in the regulation of food intake in neonatal chick
Phuong V Tran, Vishwajit S Chowdhury, Mao Nagasawa, Phong H Do, Mohammad A Bahry, Hui Yang, Mitsuhiro Furuse
1 Laboratory of Regulation in Metabolism and Behavior, Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, Japan,
2 Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University, Japan

0-23-3 The unfolded protein response pathway IRE1-XBP1 is required for myoblast differentiation
Yukako Tokutake, Keita Yamada, Satoko Hayashi, Shinichi Yonekura
1 Interdisciplinary Graduate School of Science and Technology, Shinshu University,
2 Graduate school of Agriculture, Shinshu University,
3 Institute for Biomedical Sciences, Shinshu University

0-23-4 Regulation of the cathelicidins expression in the vagina of laying hens in response to stimulation with microbial-associated molecular patterns
Ahmad Abdel-Mageed, Naoki Isobe, Yukinori Yoshimura
1 Faculty of Science Minia University Egypt, 2 Graduate School of Biosphere Science Hiroshima University Japan, 3 Research Center for Animal Science Hiroshima University Japan

0-23-5 A Comparison of Growth Performance, Carcass Quality of Male and Female Meat Type Ducks
Suteera Kunjoo, Chaiyapoom Bunchasuk, Theerawit Poeikhampha, Choawit Rakangthong
Kasetsart University

0-23-6 Analysis of growth curves of male and female Pekin ducks
Choawit Rakangthong, Theerawit Poeikhampha, Suteera Kunjoo, Wiriya Loongyai, Kanokporn Poungpong, Phongthorn Kongmun, Chaiyapoom Bunchasuk
Department of Animal Science, Faculty of Agriculture, Kasetsart University, Thailand
0-23-7 Expression profile of mood-related genes in the prefrontal cortex of Rev-erb α deficient mice  
Tsuyoshi Otsuka, Akira Kohsaka, Hue Le Thi, Tomomi Nakao, Masanobu Maeda  
Wakayama Medical University School of Medicine

0-23-8 Action of insulin-like factor 3 (INSL3) as a germ cell survival factor in boars  
Tetsuya Kohsaka, Itaru Minagawa, Dai Sagata, Ali Mohammed Pitia, Kei Terada  
Masatoshi Shibata, Yoshihisa Hasegawa, Hiroshi Sasada  
1 Laboratory of Animal Reproduction and Physiology, Faculty of Agriculture, Shizuoka University, Japan,  
2 Division of Animal Resource Production, The United Graduate School of Agricultural Science, Gifu University, Japan,  
3 Shizuoka Swine and Poultry Experimental Station, Japan,  
4 Laboratory of Animal Reproduction, School of Veterinary Medicine, Kitasato University, Japan

0-23-9 Muscle fiber type visualization using four anti-myosin heavy chain antibodies  
Shoko Sawano, Yusuke Komiya, Riho Ichitsubo, Mako Nakamura, Ryuichi Tatsumi, Yoshihide Ikeuchi, Wataru Mizunoya  
1 Fukuoka Women’s Junior College, 2 Kyushu University

0-23-10 Impact of oral L-citrulline administration on thermoregulation and heat-tolerance in chicks  
Vishwajit S Chowdhury, Phuong V Tran, Mohammad A Bahry, Phong H Do, Hui Yang, Guofeng Han, Mitsuhiko Furuse  
1 Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University, Japan,  
2 Laboratory of Regulation in Metabolism and Behavior, Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, Japan

Oral Session 24: Feeds & Feeding (Ruminants) (2)  
Thursday, 25 August 8:30-10:30 Room N301

0-24-1 PRODUCTIVITY AND NUTRIENTS QUALITY OF TWO VARIETIES Brachiaria sp ON DIFFERENT LEVEL OF FERTILIZER IN YOGYAKARTA INDONESIA  
Nafiatul Umami, Bambang Suhartanto, Meita Puspa Dewi  
Faculty of Animal Science Universitas Gadjah Mada

0-24-2 EFFECTS OF FEEDING DAIRY COW WITH INOCULATED CORN SILAGE ON MILK QUALITY  
Li-Chen Kao, Jin-Seng Lin, Hung-Hsi Hu, San-Land Young, Shi-Yong Li  
1 SymbioTech Inc., Taiwan, 2 Department of Food Science, National Penghu University, Taiwan

0-24-3 Performance of tropical dairy cows fed on cassava top silage in rice straw based diet  
Metha Wanapat, Kampanat Phesatcha, Bounnaxay Viennasay, Sungchhang Kang  
1 Tropical Feed Resources Research and Development Center (TROFREC), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand,  
2 Agricultural Unit, Department of Education, National Institute of Education, Cambodia

0-24-4 Fatty Acid Composition in M. longissimus dorsi muscle of Thai Swamp Buffalo Feeding by Soybean Oil Supplement within Concentration Rations  
Patthararangsarith Pattraphorn, Suwit Boonprong  
1 King Mongkut’s Institute of Technology Ladkrabang, 2 Ministry of Agriculture and Cooperative

0-24-5 Potential of Mixed Feed Palm Kernel Meal and Oil Palm Decanter Cake was Fermented by Rhizopus oligosporus for Bali Cattle  
ROFIQ MUHAMAD NASIR, Winia Elizabeth, Angga I Wayan, Gopar Ruslan Abdul  
1 Centre for the Agricultural Production Technology, BPPT, Indonesia,  
2 Indonesia Research of Animal Production, Agricultural Ministry
0-24-6 Evaluation of Seasonal Changes in Nutritional Properties of Kudzu Silage  
Hoang Lam Dang, Obitsu Takeo, Toshihisa Sugino, Lv Renlong  
Graduate School of Biosphere Science, Hiroshima University

0-24-7 Supplementation of Sesbania grandiflora to pregnant and lactating cows increased birth weight, milk production and preweaning growth of Bali cattle  
Imran Imran¹, S P S Budhi², Nono Ngadiono², D Dahlanuddin¹  
¹Faculty of Animal Science University of Mataram, Indonesia,  
²Faculty of Animal Science University of Gadjah Mada, Indonesia

0-24-8 Ensiling fruits byproduct for feed use aiming at long term preservation and methane mitigation in the rumen  
Yutaka Uyeno¹, Makoto Mitsumori², Pradeep Malik³, Atul Kolte¹, Raghavendra Bhatta³  
¹Shinshu University, ²NARO Institute of Livestock and Grassland Science,  
³National Institute of Animal Nutrition and Physiology (India)

0-24-9 Supplementation of suckling Bali calves with maize grain or sesbania increases growth rates prior to weaning  
T S Panjaitan¹, S Gunadi², D Dahlanuddin², D P Popp³, S P Quigley³  
¹Assessment Institute for Agricultural Technology, Jalan Raya Peninjauan Narmada, NTB, Indonesia,  
²Faculty of Animal Science, University of Mataram, Indonesia,  
³School of Agriculture and Food Sciences, The University of Queensland, Australia

0-24-10 Feeding Traits and Production Systems of Lulu Cattle in Manang and Mustang District of Nepal  
Manoj Kumar SHAH¹, Keshab Prasad Dhungana¹, Hiroki Anzai¹, Yoshiaki Hayashi¹, Hajime Kumagai³  
¹Nepal Agricultural Research Council, Regional Agricultural Research Station, Kaski Nepal,  
²Faculty of Agriculture, Meijo University, Japan, ³Graduate School of Agriculture, Kyoto University, Japan

### Oral Session 25: Animal Nutrition (Ruminants) (2)  
Thursday, 25 August  8:30-10:30  Room N302

**Chairs:** Chalong Wachirapakorn  
Khon Kaen University  
Virote Pattarajinda  
Khon Kaen University  
Tan Jung Despal  
Bogor Agricultural University

0-25-1 Effect of Saccharomyces cerevisiae Fermented Cassava Bioethanol Waste on Feed Intake, Digestibility, Rumen Fermentation and Microorganism Diversity in Dairy Calf  
Anusorn Cherdthong¹, Chanadol Supapong¹, Anuthida Saenkamsorn¹, Metha Wanapat¹, Chalong Wachirapakorn¹, Nirawan Anantasook², Pongsatorn Gunun¹  
¹Khon Kaen University, ²Udon Thani Rajabhat University,  
³Rajamangala University of Technology-Isan, Sakon Nakhon Campus

0-25-2 The effects of feeding methods during pre-weaning period on the fattening performance of male calves  
Ercan Mevliyaogullari, Serap Goncu, Murat Gorgulu  
Animal Science, Agricultural Faculty, Cukurova University

0-25-3 The utilization of yeast fermented cassava ethanol waste (YFCEW) from bio-ethanol plant in dairy cattle ration  
Chalong Wachirapakorn, Chantira Wongnen, Naphongphot Suphrap, Warangkana Daenseekaew, Boonserm Pornjantuek  
Department of Animal Science, Faculty of Agriculture, Khon Kaen University
0-25-4  Effects of exogenous fibrolytic enzyme (EFE) supplementation on rumen fermentation and fibrolytic bacteria population in ruminants fed rice straw-based diet
Chantira Wongnen, Chalong Wachirapakorn, Naphongphon Suphrap, Warangkana Daenseekaew, Boonserm Pornjantuek
Department of Animal Science, Faculty of Agriculture, Khon Kaen University

0-25-5  Effects of Dried Cassava Pulp from Bio-Ethanol Industry Supplementation on Rumen Fermentation, Rumen Cellulolytic and Xylanolytic Bacteria in Dairy Cows
Naphongphon Suphrap, Chalong Wachirapakorn, Chantira Wongnen, Warangkana Daenseekaew, Boonserm Pornjantuek
Department of Animal Science, Faculty of Agriculture, Khon Kaen University

0-25-6  Effect of Cassava Ethanol Byproducts Fermented with Yeast on Rumen Fermentation and Feed digestion
Virote Pattarajinda¹, Supakit Sunato¹, Pornchai Lowilai¹, Ngarmnit Nontaso²
¹Department of Animal Science, Faculty of Agriculture, Khon Kaen University,
²Department of Microbiology, Faculty of Science, Khon Kaen University

0-25-7  Adopting local best practice in reformulating dairy cow silage-based ration to improve cow's performances
Despal Despal, Aditya Darmawan, Istychoirah Mahdiyah, Tutik Sriana, Luki Abdullah, Idat Galih Permata
Dept. Animal Nutrition & Feed Technology, Faculty of Animal Science, Bogor Agricultural University

0-25-8  Potential of Probiotics and Oligosaccharides in Inhibiting The Caussative Agents of Diarrhea in Dairy Calves
Listiari Hendraningsih
¹University of Muhammadiyah Malang

0-25-9  Effect of Yeast Fermented and Physical forms of Corn Husk on Digestibility and Fermentation by Using In vitro Gas Techniques
Suban Foiklang¹, Metha Wanapat², Yanin Opatpanakit¹, Anon Paserakung¹
¹Faculty of Animal Science and Technology, Maejo University, Thailand,
²Tropical Feed Resources Research and Development Center (TROFREC), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand

0-25-10  Structural Features of Condensed Tannins Affect In Vitro Rumen C18:3n-3 Biohydrogenation in Dairy Cows
Nguyen Thi Huyen¹, Christos Fryganas², Irene Mueller-Harvey³, Saskia Van Laar-van Schuppen¹, Martin. W. A. Verstegen¹, Wouter. H Hendriks¹,², Wilbert. F Pellikaan¹
¹Animal Nutrition Group, Wageningen University, The Netherlands,
²Chemistry & Biochemistry Laboratory, Reading University, United Kingdom,
³Department of Farm Animal Health, Utrecht University, The Netherlands,
⁴Faculty of Animal Science, Vietnam National University of Agriculture, Vietnam
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<tr>
<th>Session</th>
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<th>Authors</th>
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<td>0-26-1</td>
<td>Dietary lecithin improved feed efficiency in female and immunocastrated male finisher pigs</td>
<td>Henny Akit(^1,2), Hyatt Frobose(^3), Fahri Fahri(^1), Darryl D'Souza(^4), Brian Leury(^1), Frank Dunshea(^1)</td>
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<td></td>
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<td>(^1)Faculty of Veterinary and Agricultural Sciences, University of Melbourne, Australia, (^2)Department of Animal Science, Universiti Putra Malaysia, Malaysia, (^3)Animal Sciences and Industry, Kansas State University, USA, (^4)Australian Pork Limited, Australia</td>
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<tr>
<td>0-26-2</td>
<td>Effect of brown rice particle size on energy and crude protein digestibility in growing-finishing pigs</td>
<td>Akemi Yamamoto, Kaede Ono, Masaki Takasu, Erika Machino</td>
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<td>Gifu University</td>
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<td>0-26-3</td>
<td>A novel probiotic thermophile reduce the fat accumulation of the pigs, dogs, and mice via the alteration of gut microbiota.</td>
<td>Hirokuni Miyamoto(^1), Wataru Suda(^2,4), Shinji Fukuda(^3,5), Hisashi Masuoka(^6), Kenichi Kawada(^6), Ryo Watanabe(^1), Shota Yoshikawa(^1), Yusuyuki Ishikawa(^1), Minami Shibata(^1), Keisuke Kogusa(^1), Shinji Wada(^1), Masahiko Hirose(^4), Yuya Suzuki(^5), Motoaki Udagawa(^5), Toshiyuki Ito(^1,9), Kenichi Mori(^1,3), Hisashi Miyamoto(^3), Hiroshi Ohno(^5), Masahira Hatton(^1,10), Hiroki Kodama(^1)</td>
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<td>(^1)Chiba University, (^2)Keio University, (^3)Sermas Ltd., (^4)Tokyo University, (^5)RIKEN IMS, (^6)Smack Ltd., (^7)Chubu Shiryo Ltd., (^8)Showa Sangyo Ltd., (^9)Keiyo Plant Engineering Ltd., (^10)Waseda University</td>
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<td>0-26-4</td>
<td>Effects of Grape Seed Proanthocyanidins on Intestinal Mucosal Immunity and Microbial community on Weaning Piglets</td>
<td>Meng Han</td>
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<td>State Key Laboratory of Animal Nutrition, China Agricultural University</td>
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<td>0-26-5</td>
<td>Different fatty acid compositions in regional adipose tissues in growing-finishing pigs</td>
<td>Sitan Chen, Bing Dong</td>
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<td>China Agricultural University</td>
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<td>0-26-6</td>
<td>EVALUATION OF FULLY OXIDIZED BETA-CAROTENE (OXBC) AS AN ALTERNATIVE TO ANTIBIOTICS FOR GROWTH PROMOTION AND DIESEASE PREVENTION IN SWINE</td>
<td>Kinh Van La(^1), James G. Nickerson(^2), William W. Riley(^3), Phu Van Nguyen(^1)</td>
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<td>(^1)Institute of Animal Sciences for Southern Vietnam, (^2)Avivagen Inc., Canada, (^3)Jinan University, China</td>
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<td>0-26-7</td>
<td>Energy Harvesting Capacity differences of Gut microbiota in Landrace and Rongchang Sows throughout Gestation and Lactation Periods</td>
<td>Hongbin Liu, Chengli Hou, Shuai Wang, Qianhong Ye, Xiaoya Zhang, Xiangfang Zeng, Shiyian Qiao</td>
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<td>Ministry of Agriculture Feed Industry Centre, China Agricultural University</td>
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<td>0-26-8</td>
<td>Nutrient Utilization Characteristics of Pigs with Various Growth Performance and the Phenotype Transformation to Recipient Mice by Fecal Transplantation</td>
<td>Tiantian Li, Beibei He, Na Li, Meng Shi, Taolin Yuan, Qiao Yan, Yuhua Zhu, Junjun Wang</td>
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<td>State Key Laboratory of Animal Nutrition, China Agricultural University</td>
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O-26-9 Effect of Human Isolated LAB Species as Probiotic Supplement for Piglet on Gut Microbiota and Intestinal Morphology
Han Seo Ko, Jang Hyeon Soo, Hee Na Kim, Yu Hyun Kang, Joo Hong Min, Sang Jip Ohh
Kangwon National University

O-26-10 Phytate-hydrolyzing Bacillus sp. Isolated from Pig Gastrointestinal Tract
Reinhard Pinontoan, Steven Ryan Susanto Tan, Lucy Jap, Henchristy Febrinanda Te, Ariella Samantha, Agustina Ika Susanti, Tjie Jan Tan
Universitas Pelita Harapan, Biology Department

Oral Session 27: Dairy Science & Industry
Thursday, 25 August 11:00-13:00 Room S207

Chairs: Sornthep Tumwasorn, Kasetsart University
Angel-Amed Duron-Benitez, National Pingtung University of Science and Technology

O-27-1 Dose-comparison study of Lactococcus lactis producing heme oxygenase-1 for treatment of dextran sulfate sodium-induced acute colitis in mice
Suguru Shigemori1,2, Tasuku Ogita3, Takeshi Shimosato1,3
1 Interdisciplinary Graduate School of Science and Technology, Shinshu University,
2 Research Fellow of the Japan Society for the Promotion of Science (JSPS),
3 Institute for Biomedical Sciences, Shinshu University

O-27-2 An immunostimulatory oligodeoxynucleotide from lactic acid bacteria promotes anaphylaxis to ovalbumin in mice
Yoshinari Yamamoto1,2, Takuma Okajima3, Tasuku Ogita4, Takeshi Shimosato1,3,4
1 Interdisciplinary Graduate School of Science and Technology, Shinshu University,
2 Research Fellow of the Japan Society for the Promotion of Science (JSPS),
3 Graduate School of Agriculture, Shinshu University,
4 Institute for Biomedical Sciences, Shinshu University

O-27-3 Measuring the Shape and Magnitude of Lactation Curves with Geometric Morphometric
Angel-Amed Duron-Benitez1, Wen-Chi Huan2
1 National Pingtung University of Science and Technology, Department of Tropical Agriculture and International Cooperation,
2 National Pingtung University of Science and Technology, Department of Agribusiness Management

O-27-4 Sustainability Tools for Small Dairy Farmers in Thailand
Sornthep Tumwasorn, Monrudee Chomsuay, Kanokorn Nonsiri
Kasetsart University, Department of Animal Science

O-27-5 Immobilization of Kefir Microorganisms on Fruit Pieces for Fermented Milk Production
Ker-Sin Ng1, Sheng-Yao Wang1,2, Ming-Ju Chen1
1 Department of Animal Science and Technology, National Taiwan University,
2 Experimental Farm, National Taiwan University

O-27-6 Analysis of Lactic Acid Bacteria in Airag and Tarag, Traditional Fermented Milk Products in Mongolia
Chien-Jang Huang1, Ming-Ju Chen1, Koichi Watanabe1, Shirchin Demberel2
1 Department of Animal Science and Technology, National Taiwan University,
2 Mongolian Academy of Science, Mongolia

O-27-7 Development of a Novel Dairy Product Using Komagateibacter nataicola and yeasts
Ping-Chu Liao1, Sheng-Yao Wang2
1 Department of Animal Science and Technology, National Taiwan University
O-27-8 Performance and profit of feeding expired milk powder for pre weaning kids of Etawah Crossed Bred in a farmer group
Bastian Titus Ari Prayogo, Ahmad Mubarak Hasan Asrori, Yuni Suranindyah
Universitas Gadjah Mada, Faculty of Animal Science

O-27-9 Farming scale impact on ration and dairy cow’s performances under traditional farm management in major producing province of Indonesia
Idat Galih Permana, Rika Zahera, Toto Toharmat, Despal Despal
Department of Animal Nutrition and Feed Technology, Faculty of Animal Science, Bogor Agricultural University

O-27-10 The Antimicrobial Activity of Bovine Colostrum Holstein Cows (FH) Towards Gram Positive and Negative Bacteria
Khusnul Khotimah
Muhammadiyah University in Malang

Oral Session 28: Feeds & Feeding (Non-Ruminants) (2) / Pig Science and Industry

Thursday, 25 August 11:00-13:00 Room N201

Chairs: Rommel C. Sulabo University of the Philippines Los Baños
Ruey-Chee Weng National Pingtung University of Science and Technology

O-28-1 Functional properties of bean husks on hindgut fermentation and microbiota in rats
Myint Htun, Hiroyuki Kishi, Yu Iwahashi, Satoshi Koike, Yasuo Kobayashi
Graduate School of Agriculture, Hokkaido University, Japan

O-28-2 Dietary Fat Preference And Dependence In Weaning Piglet And Their Performance
Ruey-Chee Weng
National Pingtung University of Science and Technology

O-28-4 Effects of Feeding Methods in Summer Season on Reproductive Performance of Lactating Sows
Yohan Choi¹, Abdolreza Hosseindoust¹, Suhyup Lee¹, MinJu Kim¹, YoungHwa Kim², Seung Min Oh¹, HyungBin Ham¹, Alip Kumar¹, Byung Jo Chae¹
¹Kangwon National University,
²Department of Animal Resources Development, Swine Science Division, National Institute of Animal Science, R.D.A, Korea

O-28-5 Heterologous Expression and Characterization of Two Alpha-galactosidases Originated from Aspergillus oryzae
Yongzhi YANG, Xu YANG, Xiaojing GUO, Shuaijuan HAN, Bing DONG, Yunhe CAO
College of Animal Science and Technology, China Agricultural University (CAU), China

O-28-6 Efficacy of mycosorbents to ameliorate the adverse effects of naturally mycotoxin contaminated corn in Cherry Valley ducks
Pawadee Pakdee¹, Kantaphat Rattanasinthuphong¹, Bundit Tengjaroenkul²
¹Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand,
²Faculty of Veterinary Medicine, Khon Kaen University, Thailand

O-28-7 FEEDING VALUE OF DRIED FERMENTATION BIOMASS IN BROILERS
Rommel C. Sulabo, Noel B. Lumbo
Animal Nutrition Division, Animal and Dairy Sciences Cluster, University of the Philippines Los Baños, Philippines
0-28-8  EFFECT OF SURGICAL AND IMMUNOLOGICAL CASTRATION ON COLLAGEN SOLUBILITY AND SHEAR FORCE VALUE IN PORK
Panneepa Sivapirunthep, Chanporn Chaosap
King Mongkut’s Institute of Technology, Faculty of Industrial Education

0-28-9  A New Development System for Automated Measurement and Recording pig weight
Cheng-Jung Yang¹, Ming-Huang Chen², Sheng-Chi Lin³, Yu-Ting Wu⁴, Yi-Chun Liao⁵, Shao-Yu Peng⁶
¹Department of Mechanical Engineering, National Pingtung University of Science and Technology, Taiwan,
²Medical Device Innovation Center, National Cheng Kung University, Taiwan,
³Center for Teaching Excellence, National Pingtung University of Science and Technology, Taiwan,
⁴Department of Forestry, National Pingtung University of science and technology, Taiwan,
⁵Department of Veterinary Medicine, National Pingtung University of science and technology, Taiwan,
⁶Department of Animal Science, National Pingtung University of science and technology, Taiwan

0-28-10  Purification of soybean Kunitz trypsin inhibitor by Two-Dimensional Liquid Chromatography with Ultraviolet detection
Tianjiao Zhou, Pingli He
State Key Laboratory of Animal Nutrition, College of Animal Science and Technology, China Agricultural University

Oral Session 29: Animal Genetics & Diversity / Animal Reproduction
Thursday, 25 August  11:00-13:00  Room N202

Chairs: Kazuhiro Kikuchi  Institute of Agrobiological Sciences, NARO
         Kunya Tuntivisoottikul  Fac. of Industrial Education, KMITL

0-29-1  POLYMORPHISMS OF CALPASTATIN GENE (CAST) AND IT’S ASSOCIATION WITH GROWTH TRAITS IN INDONESIAN THIN TAIL SHEEP (TTS)
Muhammad Ihsan Andi Dagona¹, Cece Sumantri², Ronny Rahman Noor³, Rachmat Herman⁴, Mohamad Yamin⁵
¹Hasanuddin University, ²Bogor Agricultural University

0-29-2  Genetic Diversity of Ongole Crossbred Cattle in Kebumen based on MC4R Gene
Fathoni Akhmad¹, Sumadi¹, Tety Hartatik¹, Mukhamad Khushudin¹, Dyah Maharani¹, Nono Ngadyono¹, Diah Tri Widayati¹, Cuk Tri Noviandi¹
¹Faculty of Animal Science, Gadjah Mada University, ²Association of Ongole crossbreed cattle breeder in Kebumen

0-29-3  Genetic Diversity and Association between Reproductive Traits and Four Microsatellites in Thai Locally Adapted Cattle
Kalaya Boonyanuwat¹, Phirot Sirisom², Amnnoy Phuttharatanang³
¹Biodiversity Research Sector, Bureau of Animal Husbandry and Genetic Improvement, Department of Livestock Development, Thailand,
²Tak Livestock Research and Breeding Center, Bureau of Animal Husbandry and Genetic Improvement, Department of Livestock Development, Thailand,
³Nongkwang Livestock Research and Breeding Center, Bureau of Animal Husbandry and Genetic Improvement, Department of Livestock Development

0-29-4  ESTIMATION AND PREDICTION OF BREEDING VALUES FOR RIBEYE AREA IN BEEF CATTLE FROM LIVESTOCK COOPERATIVE FARMS
Kunya Tuntivisoottikul¹, Kanya Jirajaroenrat²
¹Department of Agricultural Education, Faculty of Industrial Education, King Mongkut’s Institute of Technology Ladkrabang, Thailand,
²Department of Animal Production Technology and Fisheries, Faculty of Agricultural Technology, King Mongkut’s Institute of Technology Ladkrabang, Thailand

0-29-5  EFFECT OF HEAT STRESS ON PHYSIOLOGICAL INDICES AND HEAT SHOCK PROTEIN 70 EXPRESSION IN INDIGENOUS BREEDS OF GOAT IN NIGERIA
Mabel O Akinyemi, Paul Olaidele, Osamede H Osaiyuwu
Department of Animal Science, University of Ibadan, Nigeria
0-29-6 Whole Transcriptome Analysis of Thoroughbred and Jeju Native Horse by Exercise using RNA-sequencing
Byung Wook Cho, Teak-Soon Shin, Seong-Keun Cho, Byeong-Woo Kim, Jakyeom Seo, Jae-Young Choi, Jeong-Woong Park
Pusan National University

0-29-7 APPLICATION OF MICROSATELLITE MARKERS FOR BALI CATTLE GENETIC DIVERSITY EVALUATION IN BALI AND NUSA PENIDA ISLANDS CONSERVATION CENTER
Jakaria Jakaria, Alwiyah Alwiyah, Delisterika Mustika, Baihaqi Muhammad, Noor Ronny Rachman
Department of Animal Production and Technology, Faculty of Animal Science, Bogor Agricultural University

0-29-8 The variation of body linear of Indonesia Etawah goat at Lumajang districts, East Java and its correlation to milk production
Aris Winaya, Indah Prihartini, Abdullloh
Faculty of Agriculture and Animal Husbandry, University of Muhammadiyah Malang

0-29-9 ENDOMETRITIC IDENTIFICATION ON THROUGHBRED CROSSBREED HORSE WITH VAGINAL ACIDITY METHOD
Pradita Iustitia Sitaresmi, Kustono, Diah Tri Widayati
Universitas Gadjah Mada

0-29-10 EFFECT OF PRESYNCH-OVSYNCH/SUPEROVULATION USING A SPLIT-SINGLE INTRAMUSCULARLY OF FOLLICLE-STIMULATING HORMONE IN RUSA DEER
Vibuntita Chankitisakul1,2, Ampika Thongphakdee3, Chavin Chaisongkram4, Kanda Ponsrika5, Aunchisa Phojun6, Yoswaris Semaming2, Wuttigrai Boonkum1,2, Mongkol Techakumphu6
1 Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand,
2 Thermo-tolerance Dairy Cattle Research Group, Khon Kaen University, Thailand,
3 Wildlife Reproductive Innovation Center, Bureau of Conservation and Research, Zoological Park Organization, Thailand,
4 Department of Research, Conservation and Animal Health, Khon Kaen Zoo, Thailand,
5 Veterinary Technology Program, Faculty of Technology, Udon Thani Rajabhat University, Thailand,
6 Department of Obstetrics Gynaecology and Reproduction, Faculty of Veterinary Science, Chulalongkorn University, Thailand

Oral Session 30: Meat & By-products (1)
Thursday, 25 August 11:00-13:00 Room N203

Chair: Chih-Ming Chen National Pingtung University of Science and Technology

0-30-1 The Microbial Analyses of Fermented Sausage from Tetelan Beef using Probiotic Culture Starter
Aulia Irhamni Fajri1, Irma Isnaia Arief2, Henny Nuraini2
1 National Pingtung University of Science and Technology, Taiwan, 2 Bogor Agricultural University, Indonesia

0-30-2 MICROBIOLOGY QUALITY OF BEEF DENDENG TREATED BY CURING WITH OR WITHOUT SODIUM NITRITE SOLUTION AT DIFFERENT STORAGE AND AFTER FRYING
Suryati Tuti, Isnaia Arief Irma, Wulandari Zakiah, Murtini Devi, Febriantini Dwi, Nurul Astri Yuanita
Bogor Agricultural University

0-30-3 Improvement of intestinal health by probiotic fermented beef product
IRMA ARIEF ISNAIA, ADI WINARTO, MARGARETHA MULATSIH KANDI, AULIA IRHAMNI FAJRI
Bogor Agricultural University, Indonesia
O-30-4 Difference of Gelatin Quality Goat Leather and Fur
Amertaningtyas Dedes, Jaya Firman
Faculty of Animal Husbandry Brawijaya University

O-30-5 Preliminary study of ethanol extract of Phyllanthus acidus L. (Skeels) leaves as natural antioxidant in raw and cooked ground pork
Thi Kim Tuyen Nguyen, Pilasombat Komkhae, Laosinwattana Chamroon
King Mongkut’s Institute Technology Ladkrabang

O-30-6 The study of long time feed of low level radioactive contaminated hay to animal health and animal products
Junyou LI1, Chunxiang PIAO2, Hirohiko IITSUKA1, Shigeru HASEGAWA1, Masanori IKEDA1, Tomotsugu TAKAHASHI1, Yoshinosuke FUKUMOTO3, Natsuko KOBAYASHI1, Atsushi HIROSE1, Keitaro TANO1, Keiichiro MAEDA1
1Animal Resource Science Center, Graduate School of Agricultural and Life Sciences, The University of Tokyo, 2Department of Agricultural Resources and Environment, Faculty of Agricultural, Yanbian University, 3Graduate School of Agricultural and Life Sciences, The University of Tokyo, 4Department of Veterinary Medical Sciences The University of Tokyo

O-30-7 Effect of Ractopamine Supplementation in Diets on Longissimus Muscle Characteristics of Finishing Pigs
Krongkaew Kaewthaworn1, Ronachai Sitthigripong1, Chanporn Chaosap2, Kamon Chaweewan3
1Faculty of Agricultural Technology, King Mongkut’s Institute of Technology Ladkrabang, Thailand, 2Faculty of Industrial Education, King Mongkut’s Institute of Technology Ladkrabang, Thailand, 3Department of Livestock Development, Thailand

O-30-8 Effect of dipping in Longan seed extract phenolic solution on the shelf life and quality of pork under refrigerated storage
Julakorn Panatuk1, Wantamas Jantasin1, Kridda Chukiatsiri1, Tanom Tathong2, Suthipong Uriyapongson3
1Faculty of Animal Science and Technology, Maejo University, Thailand, 2Program in Food Technology, Faculty of Agriculture and Technology, Nakhon Phanom University, Thailand, 3Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand

O-30-9 Effects of various types and high additional levels of sugars on color and sensory attributes of Chinese- style pork jerky
Chih-Ming Chen, Hsien-Tang Lin, Pei-Shan Wu, Ching-Yi Pan, Rui-Lin Chang
National Pingtung University of Science and Technology

O-30-10 Myosin Heavy Chain Expression of Purebred and Crossbred Pig
Wuttikorn Buajoom, Chanporn Chaosap, Panneepa Sivapirunthep
King Mongkut’s Institute of Technology Ladkrabang Faculty of Industrial Education

Oral Session 31: Hygiene / Animal Physiology & Anatomy
Thursday, 25 August 11:00-13:00 Room N204

Chairs: Narayana H Mohan ICAR-National Research Centre on Pig
Fitriyanto Agus Nanung Gadjah Mada University

O-31-1 Quality of Liquid Organic Fertilizer from Rabbit’s Urine with The Addition of Nitrifying Bacteria, Urea, and Leucaena leucocephala
Theresia Galuh Wandita, Setyo Rahmat Darmawan, Suahrjono Triatmojo, Nanung Agus Fitriyanto
Faculty of Animal Science and Industry, Universitas Gadjah Mada
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| 0-31-2   | Improving Methane Gas Production from Wastepaper by Adding Surfactant during Pretreatment with Rumen Fluid | Shuhei Takizawa¹, Yasunori Baba², Chika Tada¹, Yasuhiro Fukuda¹, Yutaka Nakai¹ | ¹Laboratory of Sustainable Animal Environmental Science, Graduate School of Agricultural Science, Tohoku University, Japan  
²Research Institute for Bioresources and Biotechnology, Ishikawa Prefectural University, Japan |
| 0-31-3   | ISOLATION OF INDIGENOUS DENITRIFYING BACTERIA FROM THE ODOROUS REGION OF AN LAYER FARM AND ITS POTENTIAL AS NITRATE REDUCING AGENT | Agus Fitriyanto Nanung¹, Amalia Ditasari¹, Erwanto Yun¹, Pertiwiningrum Ambar¹, Triatmojo Suharjono¹, Bachruddin Zaenal¹, Wihandojo¹, Tomoyuki Nakagawa¹, Takashi Hayakawa² | ¹Faculty of Animal Science Gadjah Mada University Indonesia  
²Faculty of Applied Biological Sciences Gifu University Japan |
| 0-31-4   | Volume reduction of cattle rumen fluid using a coagulation-flocculation process and its capability for lignocellulose degradation and methane production | Kenichi Abe, Shuhei Takizawa, Yasuhiro Fukuda, Chika Tada, Yutaka Nakai | Laboratory of Sustainable Environmental Biology, Graduate School of Agricultural Science, Tohoku University, Japan |
| 0-31-6   | Central administration of neuropeptide Y acts as an anti-stress factor in heat exposed chicks | Mohammad A Bahry¹, Vishwajit S Chowdhury², Hui Yang¹, Phuong V Tran¹, Phong H Do¹, Guofeng Han¹, Mitsuhiro Furuse¹ | ¹Laboratory of Regulation in Metabolism and Behavior, Graduate School of Bioresource and Bioenvironmental Science, Kyushu University, Japan  
²Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University, Japan |
| 0-31-7   | A Study on Fat Deposition from 1-6 Months of Age in Northeast Thailand Indigenous Pigs | Nitchanan Chukerd¹, Pongchan Na-Lampang², Putthaporn Pumrojana¹, Nantiya Saetiew¹, Watchara Ninphet¹ | ¹Division of Animal Science, Faculty of Science and Technology, Muban Chombueng Rajabhat University  
²School of Animal Production Technology, Institute of Agricultural Technology, Suranaree University of Technology |
| 0-31-8   | Effect of oral administration of colostrum on immune function in the goat digestive tract | Shoko Matsukawa, Toshihisa Sugino, Yukinori Yoshimura, Naoki Isobe | Hiroshima University |
| 0-31-9   | Effect of oral administration of colostrum on immune function in the goat digestive tract | Shoko Matsukawa, Toshihisa Sugino, Yukinori Yoshimura, Naoki Isobe | Hiroshima University |
| 0-31-10  | Effect of temporary cessation of milking on antimicrobial components in goat milk | Jo Ueda, Yukinori Yoshimura, Naoki Isobe | Hiroshima University |
### Oral Session 32: Feeds & Feeding (Ruminants) (3)

**Thursday, 25 August 11:00-13:00 Room N301**

**Chairs:** Manoj Kumar Gendley, College of Veterinary Science and A.H., Chhattisgarh Kamdhenu University  
Wan Zahari Mohamed, Universiti Malaysia Kelantan (UMK)  
Tri Astuti, Muara Bungo University  
Yuni Surenindyah, Universitas Gadjah Mada

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<td>O-32-1</td>
<td>Influence of Chromium on Nutrient Utilization and Blood Biochemical Parameters in goat</td>
<td>Manoj Kumar Gendley, S. P. Tiwari, U.K. Mishra</td>
<td>Chhattisgarh Kamdhenu University, India</td>
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<td>O-32-2</td>
<td>Effect of fermented juice from fruit peels to use as an additive for improved quality of roughage</td>
<td>Yupha Seesawhea¹, Pornpan Saenphoom¹, Smerjai Bureenok², Anan Chaokaur³, Suphavadee Chimtong¹, Attapol Tiantong³</td>
<td>¹Faculty of Animal Sciences and Agricultural Technology, Silpakorn University, ²Faculty of Sciences and Liberal Arts, Rajamangala University of Technology Isan</td>
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<td>O-32-3</td>
<td>In Situ Degradation Characteristics of Indigofera zollingeriana at Different Cutting Intervals during Wet and Dry Season</td>
<td>Edgar Orden¹, Romero Loretta², Del Rosario Neal³, Galamgam Jovani¹, Gonzales Rhanny¹</td>
<td>¹Central Luzon State University, ²Benguet State University</td>
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<td>O-32-4</td>
<td>NUTRIENT CONTENT OF COMPLEAT FEED BASE ON FERMENTED OF PALM OIL FROND FOR RUMINANT</td>
<td>Astuti Tri¹, Yelni Gusni¹, Rofiq M. Nasir², Santoso Urip Santoso¹, Amir Yusrizal³</td>
<td>¹Muara Bungo University, ²Agency for The Assessment and Application of Technology (BPPT), ³STAI Yasni</td>
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<td>O-32-7</td>
<td>The effect of supplementation ginger (Z. Officinale) powder on feed consumption, milk production and components of goat</td>
<td>Yuni Surenindyah, Nurliyani Nurliyani, Budi Prasetyo Widyobroto</td>
<td>Universitas Gadjah Mada</td>
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<td>O-32-8</td>
<td>USING LOCALLY TREE FOR FEEDING GOAT IN BINANGUN REGION, BLITAR DISTRICT EAST JAVA, INDONESIA</td>
<td>Asmah Hidayati</td>
<td>Faculty of Agricultural Animal Science, University of Muhammadiyah Malang</td>
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<td>O-32-10</td>
<td>Effect of soybean (Glicine max, Merrill) epidermis level in diet on protein content and in vitro gas production test parameters</td>
<td>HARTUTIK HARTUTIK, Marjuki Marjuki</td>
<td>Faculty of Animal Husbandry, Brawijaya University</td>
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### Oral Session 33: Animal Nutrition (Ruminants) (3)

**Thursday, 25 August 11:00-13:00 Room N302**

**Chairs:** Pin Chanjula  
Prince of Songkla University  
Jacob Nulik  
East Nusa Tenggara Assessment Institute for Agriculture Technology  

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<td>O-33-1</td>
<td>In vitro digestibility of fermented rice straw supplemented with cassava tuber and leaves using ruminal fluid of Bali cattle</td>
<td>Cuk Tri Noviandi, Zazin Mukmila, Ristianto Utomo, Subur Priyono Sasmito Budhi, Ali Agus, Andriyani Astuti</td>
<td>Faculty of Animal Science, Universitas Gadjah Mada, Indonesia</td>
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<td>O-33-2</td>
<td>Rumen contents from slaughter house as alternative feed for replacing forage in ruminant diets</td>
<td>Ristianto Utomo, Lies Mira Yusriati, Cuk Tri Noviandi, Aryogi, Isnandar</td>
<td>Faculty of Animal Science, Universitas Gadjah Mada, Indonesia, Indonesian Beef Cattle Research Station, Indonesia, National Animal Husbandry Training Center, Indonesia</td>
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<td>O-33-3</td>
<td>Influences of Parts of Frond Ensilage and Pelleting Methods on Chemical Physical and Degradability of Pellet Ensiled Oil Palm Frond</td>
<td>Ongarge Insung</td>
<td>Rajamangala University of Technology Srivijaya</td>
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<td>O-33-4</td>
<td>Voluntary feed intake, rumen fermentation and microbial protein synthesis of beef cattle fed fermented cassava starch residue</td>
<td>Ruangyote Pilajun</td>
<td>1. Department of Animal Science, Faculty of Agriculture, Ubon Ratchathani University, Thailand, 2. Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand</td>
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<td>O-33-5</td>
<td>The influence of sowing date and trellising on the flowering of some promising herbaceous legumes for eastern Indonesia</td>
<td>Jacob Nulik, Evert Hosang, Debora Kana Hau, Yanto Liunokas, Yendri Aby, Yakobus Uran, Kendrick Cox</td>
<td>1. Department of Agriculture and Fisheries (Queensland), 2. Departemen Pertanian Balai Pengkajian Teknologi Pertanian-NTT (BPTP-NTT)</td>
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<td>O-33-6</td>
<td>BIOCONVERSION OF COCOA POD HUSK THROUGH FERMENTATION WITH MOL RUMENT CONTENT AS RUMINANT FEED</td>
<td>Nurhaita Nurhaita, Definiati Neli, Suliasih Suliasih</td>
<td>Muhammadiyah University of Bengkulu</td>
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<td>O-33-7</td>
<td>Nutrients Quality of Fermented Complete Feed Based on By-Product of Sago (Metroxylon sp.) and Cassava (Mannihot esculenta Cranz)</td>
<td>Masitah Siti, Utomo Ristianto, Noviandi Cuk Tri</td>
<td>Faculty of Animal Science Gadjah Mada University</td>
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<td>O-33-8</td>
<td>Improving Rice Straw Quality by Treated with Monosodium Glutamate by-Product (MSGB) for Ruminant Diets</td>
<td>Phongthorn Kongmun, Sittisak Kongsin, Nuttareakha Polsiri, Somkiet Prasahnpanich, Kanokporn Poungpong, Choawit Rakangthong, Chaiyapoom Bunchasak, Wiriy Loongyai, Theerawit Poekhampya</td>
<td>Department of Animal Science, Faculty of Agriculture, Kasetsart University, Thailand</td>
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O-33-9 Studies on cashew nut shell liquid withdrawal traits and its effect on methanogenesis and methanogen population in bovine rumen
Abrar Arfan¹, Makoto Kondo², Tomomi Ban-Tokuda², Hiroki Matsui²
¹Department of Animal Science, Agriculture Faculty of Sriwijaya University, Indonesia,
²Graduate School of Bioresources, Mie University, Japan

O-33-10 NUTRIENT DIGESTIBILITY AND BIOAVAILABILITY OF MINERALS IN BEEF CATTLE FED WITH DIFFERENT LEVELS OF CONCENTRATE AND OIL PALM STEM-LEAF
Warly Lili¹, Suyitman¹, Evitayani¹, Fariani Armina²
¹Department of Animal Nutrition and Feed Technology, Fac. of Animal Science Andalas University, Indonesia,
²Department of Animal Nutrition, Fac. of Agriculture Sriwijaya University, Indonesia

Oral Session 34: Animal Nutrition (Non-Ruminants) / Small Ruminants
Thursday, 25 August 11:00-13:00 Room N303

Chairs: Hirokuni Miyamoto Chiba University
Takeyuki Ozawa Nippon Veterinary and Life Science University

O-34-1 Establishment of Indicators for Intestinal Health Evaluation in Red Pandas
Fang-Yu Kuo¹, Yi-Ming Wang¹, I-Lin Tsai¹, Chia-Neng Chung¹, Wan-Ying Chen¹, Han-Tsong Wang¹,
Mei-Fong Lin¹
¹National Taiwan University, ²Taipei Zoo, ³Chinese Culture University

O-34-2 Determination of the energy content and amino acid digestibility of double-low rapeseed cakes fed to growing pigs
Peili Li, Fei Wu, Yi-fan Chen, Panpan Guo, Zhongchao Li, Ling Liu, Changhua Lai
1 State Key Laboratory of Animal Nutrition, Ministry of Agriculture Feed Industry Centre, China Agricultural University, P.R. China

O-34-3 Effects of particle size, adaptation period and evaluation methods on estimates of available energy content and nutrient digestibility of wheat
Yuanfang Fan, Panpan Guo, Yuyuan Yang, Tian Xia, Ling Liu, Yongxi Ma
State Key Laboratory of Animal Nutrition, China Agricultural University

O-34-5 Efficacy of Probiotics (BACTOSAC-P) in Nursery-Fattening Pigs Diets
Sawitree Wongtangtintharn¹, Winai Jaikan¹, Jowaman Khajarem¹, Nattaya Banglarp¹, Pairat Thitisak²
¹Khon Kaen University, ²K.M.P. Biotech Co, Ltd., Thailand

O-34-6 Investment in Research and Development Programs on Goat in Central Luzon, Philippines
Maria Excelsis Orden, Fe Porciuncula, Edgar Orden
Central Luzon State University

O-34-7 Backyard Raisers' Attitudes Toward Artificial insemination in Goat in the Philippines
Jackielou Gallarde¹, Maria Excelsis Orden¹, Aubrey Balbin², Ana Marie Alo¹, Jamilla Fatima Saturno¹,
Frederick Godoy¹
¹Central Luzon State University, ²Isabela State University,
³Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development

PATRICIA BARCELO, ANNA MARIE ALO, EDWIN VILLAR, EMILIO CRUZ, ANITA ASUNCION,
JUVIIDEA JAYE CASTILLO, NEAL DEL ROSARIO, ROLANDO HIPE, JUNLAR PEPITO, NATHANIEL NAANEP,
REYNALDO EJERCITO, MARIA EXELCIS ORDEN
DON MARIANO MARCOS MEMORIAL STATE UNIVERSITY
**Oral Session 35: Animal Welfare & Health Management**

*Thursday, 25 August  14:00-16:00  Room S207*

**Chairs:** Virginia Venturina  
Central Luzon State University  
Peter Windsor  
The University of Sydney

**0-35-1**  
**Activation of RAW264.7 macrophages by the antimicrobial peptide sublancin: involvement of MAPK and NF-κB signaling pathways**  
Shuai Wang, Qianhong Ye, Qing Yang, Xiangfang Zeng, Shiyuan Qiao  
State Key Laboratory of Animal Nutrition, Ministry of Agriculture Feed Industry Centre, China Agricultural University

**0-35-2**  
**Monitoring system of body temperature in calves by using infrared thermography**  
Tohru Suzuki1, Yuchi Yoshinaga2, Masafumi Miyata1, Syoichi Kimura1, Ken Katsuda3  
1 National Institute of Animal Health, NARO, 2 Nippon Avionics Co., Ltd.

**0-35-3**  
**Internal parasite control in large ruminants by use of anthelmintic medicated urea molasses blocks**  
Peter Windsor1, Teresa Nemanic1, Nicole Selwood1, Nichola Calvani1, Syseeng Nampanya2, Sothoeun Suon1, Russell Bush1  
1 Faculty of Veterinary Science, University of Sydney

**0-35-4**  
**Physiological parameters of young cattle transported from Hawai‘i to US west coast during summer.**  
C.N. Lee, T. Sy, A. Stokes, T Richards  
1 Dept. of HNFAS, University of Hawai-Manoa, USA

**0-35-5**  
**FIELD TRIAL ON THE EFFICACY AND TOXICITY OF SELECTED FASCIOLICIDES IN BUFFALOES (Bubalus bubalis).**  
NORaine Medina1, Jose Vien Blas2, Virginia Venturina2, Claro Mingala2  
1 Central Luzon State University, College of Veterinary Science and Medicine, 2 Philippine Carabao Center

**0-35-6**  
**Preculture freezing and incubation on bacteriological isolation from subclinical mastitis milk samples in dairy cows**  
Tipwadee Prapaiwong1,2, Chaïwat Jarassaeng2, Chalong Wachirapakorn1, Arunee Ritthiphanan2  
1 Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand, 2 Department of Surgery and Theriogenology, Faculty of Veterinary Medicine, Khon Kaen University, Thailand

**0-35-7**  
**Do ruminants experience nausea?: The effects of administration of “cisplatin”, an emetic agents, on goats**  
Masato Aoyama, Minami Shioya, Satoshi Yoshida, Yume Tsukamoto, Shohei Sugita  
Utsunomiya University Faculty of Agriculture

**0-35-8**  
**FIELD VALIDATION OF FAMACHA SYSTEM IN THE ESTIMATION OF DEGREE OF ANAEMIA IN GOATS WITH HAEMONCHOSIS**  
Virginia Venturina, Romnick Mariano, Elfren Celestino, Virgilio Viernes  
Central Luzon State University
O-35-9  Stable Management and Colic Prevalence with Different Condition in Indonesian Horse Farming
Yulianto Muhammad Danang Eko, Baliarti Endang, Adi Amien Fahrianto
Department of Animal Production Faculty of Animal Science Universitas Gadjah Mada

O-35-10 The Learning Achievement on the OIE Standards in Animal Welfare at Slaughter and Transportation Training Program of Farmers
Cherdpong Kheerajit
Kasetsart University

Oral Session 36: Poultry Science & Industry (2)
Thursday, 25 August 14:00-16:00 Room N201

Chairs: Fuminori Kawabata  Kyushu University
        Sarwar Jahan Syed  University of Rajshahi
        Bapon Dey  Kyushu University

O-36-1 The Effect of Lighting Regimens on Broiler Growth: 3. Status of Corticosteroid Hormone and Feeding Behaviour
Sri-Harimurti Sri-Harimurti, Diah Reni-Asih, Wihandoyo Wihandoyo, Heru Sasongko, Sri Sudaryati, Bambang Ariyadi, Muhammad Mauludin
Universitas Gadjah Mada

O-36-2 Effects of Genotypes, Rearing System and Sex on Meat Yield Characteristics of Chicken at 48 Weeks of Age
Md. Shariful Islam1,2, Sarwar Jahan Syed1, Md. Saiful Islam3, Md. Akhtarul Islam1
1Department of Animal Husbandry and Veterinary Science, University of Rajshahi, Bangladesh,
2Research Institute for Applied Mechanics, Kyushu University, Japan,
3Department of Zoology, University of Rajshahi, Bangladesh

O-36-3 Analysis of growth curves in Betong chicken
Mongkol Thepparat1, Sunee Trimanee2, Pitchayanipa Klotontong3, Santi Mhadmhan1
1Songkhla Rajabhat University, 2Department of Livestock Development, 3Prince of Songkla University

O-36-4 Phenotypic and functional differences among γ δ T cell subsets in chicken
Min Jeong Gu1, In Kyu Lee1, Kwang Hyun Ko1, Girak Kim1, Tae Sub Park2, Byung-Chul Park2, Cheol-Heui Yun1,2
1Department of Agricultural Biotechnology and Research Institute for Agriculture and Life Sciences, Seoul National University, Korea,
2Institute of Green Bio Science Technology, Seoul National University, Korea

O-36-5 The Productivity Performance of Male and Female Kumbang Janti Duck Reared Intensively
Tertia Delia Nova, Rijal Zein
Andalas University Animal Science

O-36-6 Expression patterns of taste sensors in oral and gastrointestinal tissues of chickens
Fuminori Kawabata, Yuko Kawabata, Yuta Yoshida, Momoko Higashida, Hikaru Ohmori, Shotaro Nishimura, Shoji Tabata
Laboratory of Functional Anatomy, Faculty of Agriculture, Kyushu University

O-36-7 6-Methoxyflavanone as the antagonist for functional bitter taste receptors in chickens
Bapon Dey, Fuminori Kawabata, Yuko Kawabata, Shotaro Nishimura, Shoji Tabata
Laboratory of Functional Anatomy, Faculty of Agriculture, Kyushu University, Japan
Oral Session 37: Animal Reproduction (3)

Thursday, 25 August 14:00-16:00 Room N202

**0-37-1** IDENTIFICATION OF REPRODUCTIVE PERFORMANCE OF ETTAWA CROSSED BREED GOATS ON DIFFERENT BODY CONDITION SCORE USING VAGINAL SMEAR

Diah tri Widayati, Dewi Wahyu Puspitasari, Sigit Bintara, Kustono, Adiarto, Yustin Yuni Suranindyah

Faculty of Animal Science, Gadjah Mada University, Indonesia

**0-37-2** Dietary Yeast (Saccharomyces cerevisiae) Probiotic for Growth Performance, Body Weight and Semen Quality Enhancements in Goats

Jatuporn Kajaysri, Umaporn Rungroekrit, Chaiwat Chumchoung

Clinic for Obstetrics Gynecology Andrology and Artificial Insemination of Domestic Animals, Faculty of Veterinary Medicine, Mahanakorn University of Technology, Thailand

**0-37-3** EFFECT OF LONG DISTANCE TRANSPORT ON THE VIABILITY OF FRESH AND FROZEN-THAWED GOAT EMBRYOS STORED IN A PORTABLE INCUBATOR

Florecida Aquino, Ester Flores, Eufrocina Atabay

Philippine Carabao Center

**0-37-4** THE QUALITY AND Ca\(^{2+}\) INTENSITY CHARACTERS OF LOCAL INDONESIAN GOAT SPERM AFTER FREEZING BY NONCONVENTIONAL METHODS OF CRYOPRESERVATION

Gatot Ciptadi\(^1\), Agus Budiarto\(^1\), Sri Rahayu\(^2\), Sri Wahjunosingsih\(^1\), Muhammad Nasich\(^1\), Muhamad Nur Ihsan\(^1\), Fatchiyah Fatchiyah\(^2\), G. Ciptadi Mudawamah\(^1\)

\(^1\)Faculty of Animal Husbandry, Brawijaya University, \(^2\)Faculty of Basic Sciences, Dept Of Biology, Brawijaya University, \(^3\)Faculty of Animal Husbandry, Islamic University of Malang

**0-37-5** EFFECT OF DIFFERENT CRYOPROTECTANTS ON THE VIABILITY OF CRYOPRESERVED BOER GOAT SPERM CELLS IN THE PHILIPPINES

Aubrey Joy Balbin

Isabela State University, Philippines

**0-37-6** Major proteins in caprine seminal plasma

Thunchira Thepparat\(^1\), Jitthasak Maungkhio\(^2\), Chanyut Kaphol\(^2\), Jakkapop Chansaad\(^2\), Narong Leingcharoen\(^2\), Sittirak Roytrakul\(^1\)

\(^1\)Prince of Songkla University, Thailand, \(^2\)Department of Livestock Development, Thailand, \(^3\)National Center for Genetic Engineering and Biotechnology, Thailand
0-37-7 INFLUENCES OF CUMULUS CELLS DURING IN VITRO FERTILIZATION OF GOAT OOCYTE
Wahjuningsih Sri, Nur Ihsan Muhammad, Sasmito Djati Muhammad, Isnaini Nurul
1University of Brawijaya

0-37-8 C3b component contributes to maintenance of pregnancy by inducing immune tolerance in mouse
Sayuri Fukushima 1, Keigo Nakamura 2, Kazuhiko Imakawa 2, Yoshihito Suda 1
1Miyagi University School of Food, Agricultural and Environmental Sciences,
2The University of Tokyo Graduate School of Agricultural and Life Sciences

0-37-9 Akr1a deficiency in mice decreases ascorbate synthesis but improves developmental potential of oocytes matured in vitro
Naoko Kimura 1,6, Yuki Hoshino 1, Ren Watanabe 1,6, Yoka Okabe 1, Motoko Takahashi 1, Satoshi Miyata 3, Aya Umeno 4, Yasukazu Yoshida 4, Junichi Fuji 1
1Laboratory of Animal Reproduction, Graduate School of Agricultural Science, Yamagata University,
2Department of Biochemistry, Sapporo Medical University School of Medicine,
3Department of Internal Medicine, Osaka Hospital, Japan Community Healthcare Organization,
4Health Research Institute, National Institute of Advanced Industrial Science and Technology (AIST),
5Department of Biochemistry and Molecular Biology, Graduate School of Medical Science, Yamagata University,
6Laboratory of Animal Reproduction, United Graduate School of Agricultural Sciences, Iwate University

0-37-10 The corpus luteum is a source and target of insulin-like factor 3 (INSL3) in pregnant goats
Ali M Pitia 1,2, Itaru Minagawa 1,2, Hiroshi Sasada 3, Kazuyoshi Hashizume 4, Tetsuya Kohsaka 1,2
1Laboratory of Animal Reproduction and Physiology, Faculty of Agriculture, Shizuoka University, Japan,
2Division of Animal Resource Production, The United Graduate School of Agricultural Science, Gifu University, Japan,
3Laboratory of Animal Reproduction, School of Veterinary Science, Kitasato University, Japan,
4Laboratory of Veterinary Physiology, Faculty of Agriculture, Iwate University, Japan

Oral Session 38: Meat & By-products (2) / Beef Cattle & Industry
Thursday, 25 August 14:00-16:00 Room N203

Chairs: Russell David Bush The University of Sydney
Junyou Li The University of Tokyo

0-38-1 Inovation Technology of Functional Chicken Sausage Formulated Using Microencapsulated Mixture of Selaroides spp) and Clarias sp Fish Oil
Minarny Gobel
Tadulako University Central Sulawesi Indonesia

0-38-2 The Physical and Chemical Properties of Gelatin Extracted From Chicken Leg Skin
Meity Sompie, Wiesje Ponto, Jerry Kalele, Friets Ratulangi
Faculty of Animal Science Sam Ratulangi University

0-38-3 EFFECT OF 2% SODIUM LACTATE ON MEAT QUALITY AND MICROBIOLOGICAL PROPERTIES OF BROILER BREAST MEAT
Gnararatnha S H 1, Herath H M G P 1, Damith Udayanga 2
1Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka, 2Nelma Farm Pvt Ltd, Sri Lanka

0-38-4 The Physicochemical Properties of Refined Duck Fat in Taiwan
Hsin-Jung Lee 1, You-Ting Chiu 2, Meng-Ru Lee 1
1Animal Products Processing Division, Livestocks research Institute, Taiwan,
2Shin-Sei Frozen Foods Co., LTD, Taiwan
O-38-5 THE EFFECT OF TAPIOKA FLOUR ADDITION ON THE QUALITY OF SAUSAGE MIXTURE OF CHICKEN AND TUNA FISH
Agnes Triasih Agustin1, Meity Sompie2, Nurmelita Taher1, Erwin H B Sondakh2, Christina Yunus2
1Faculty of Fisheries and Marine Sciences, Sam Ratulangi University, 
2Faculty of Animal Husbandry, Sam Ratulangi University

O-38-6 The Effect of Super Red Dragon Fruit (Hylocereus costaricensis) Peels on Physico Chemical, Antioxidant y and Microstructure of Chicken Sausage
Lilik Eka Radiati1, Firman Jaya1, Dita Eka Oktavianingtyas2, Fayca2
Brawijaya University

O-38-7 Fukuoka Livestock Hygiene Service Center supports hygiene of Hakata Wagyu
Riki Hiromatsu1, Kyoheri Hamada1, Hiroki Ito1, Tatsuro Hifumi1, Torata Ogawa1, Hiroaki Ryuo2, Yoshihiro Isozaki1, Kazuki Ishibashi1, Kazuhiko Imamura2
1Fukuoka Livestock Hygiene Service Center, 2Livestock Industry Division of Fukuoka Prefecture

O-38-8 THE EFFECT OF SEASON ON THE BOTANICAL COMPOSITION AND QUALITY OF FEEDSTUFF USED IN BALI CATTLE FATTENING AT SMALLHOLDER FARMS
Paulus Klaui Tahuk1, Subur Priyono Sasmito Budhi2, Panjono Panjono2, Endang Baliarti2
1Timor University, 2Gadjah Mada University

O-38-9 Participation of local Sumbawanese and Balinese migrant women in cattle production system in Sumbawa eastern Indonesia
S R Thei1, Y A Akhyar2, H Hermansyah2, L Xie3, M Cosijn3
1Faculty of Agriculture University of Mataram, Indonesia, 
2Faculty of Animal Science University of Mataram, Indonesia, 3CSIRO Australia, Australia

O-38-10 Changes in bali cattle production systems in sumbawa, eastern indonesia and the implications on feed supply systems
H Hermansyah1, Y A Sutaryono1, D H Sofyan1, S H Dilaga1, L Xie, M Cosijn2
1Faculty of Animal Science University of Mataram, Indonesia, 2CSIRO Australia, Australia

Oral Session 39: Feeds & Feeding (Ruminants) (4)
Thursday, 25 August 14:00-16:00 Room N301

Chairs: Mardiati Zain Andalas University
Edgar Orden Central Luzon State University
Hajime Kumagai Graduate School of Agriculture, Kyoto University
Genki Ishigaki University of Miyazaki
Astuti Andriyani Universitas Gadjah Mada

O-39-1 Supplementation of mineral (Phosphor and Sulfur) and Saccharomyces cerevisiae in diet based of Cocoa by product of Sheep
Mardiati Zain, Irsan Ryanto, Erpomen Erpomen
Andalas University

O-39-2 Effect of alfalfa hay feeding on nitrogen utilization of Simmental beef cattle kept in Gansu province, China
Toshiyoshi Ichinohe1, Atsushi Tsunekawa2, Tianhai Yan3, Xianjiang Chen4, Fujiang Hou4, Nobuyuki Kobayashi2
1Faculty of Life and Environmental Science, Shimane University, Japan, 
2Arid Land Research Center, Tottori University, Japan, 
3Agri-Food and Biosciences Institute, UK, 
4College of Pastoral Agriculture Science and Technology, Lanzhou University, China
**0-39-3** Yield and forage quality in the canopy of napiergrass genotypes  
Hamid Kadwal, Yasuyuki Ishii, Yusuke Iki, Sachiko Idota  
1Interdisciplinary Graduate School of Agriculture and Engineering, University of Miyazaki,  
2Faculty of Agriculture, University of Miyazaki,  
3Graduate School of Agriculture, University of Miyazaki

**0-39-4** Evaluation of adaptability of Brachiaria cultivars in the temperate and humid area of Japan  
Genki Ishigaki, Pattama Nitthaisong, Yogi Sidik Prasogo, Kiichi Fukuyama, Ryo Akashi  
Faculty of Agriculture, University of Miyazaki

**0-39-5** EFFECT OF Aerva lanata AND Cassia auriculata EXTRACTS AND SYNTHETIC ANTIOXIDANT: BUTYLATED HYDROXYTOLUENE ON THE RANCIDITY OF VEGETABLE OIL  
Kularathne K C Deshani, H M Gayani Priyadarshani Herath, Sumudu Disanayake  
1Department of Livestock Production Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka,  
Sri Lanka,  
2Gold Coin Feed Mills (Lanka), Sri Lanka

**0-39-6** Effect of different long-term storage with rice bran-CaCO3 of aerobic thermolignocellulolytic inoculums on fiber compound content of fermented rice straw  
Andriyani Astuti, Lies Mira Yusiat, Zaenal Bachruddin, Asih Kurniawati  
Faculty of Animal Science Universitas Gadjah Mada Indonesia

**0-39-7** THE EFFECTS OF COCONUT MEAT WASTE AS FEED ALTERNATIVE IN SHEEP RATION ON CHOLESTEROL CONTENT AND MEAT QUALITY  
Muhlisin Muhlisin, Cuk Tri Noviandi, Ristianto Utomo, Lies Mira Yusiat  
Faculty of Animal Science, Universitas Gadjah Mada

**0-39-8** Effects of supplementary mother liquor from mono sodium glutamate on in vitro rumen fermentation of roughage and concentrate as substrates  
Hajime Kumagai, Yoshiaki Sato, Motoharu Takeda, Takashi Nakanishi, Lin Wang, Kazato Oishi, Hiroyuki Hirooka  
1Graduate School of Agriculture, Kyoto University,  
2Ajinomoto Co., Inc.

**0-39-9** SILAGE QUALITY OF BMR SORGHUM AND SWEET SORGHUM GROWTH ON SEDIMENTATION ULTISOL SOIL  
Widhi Kurniawan, Syam Rahadi, Rahman Raham, Luki Abdullah, Panca Dewi, Suprianto Suprianto  
1Faculty of Animal Science, Universitas Halu Oleo,  
2Faculty of Animal Science, Bogor Agricultural University,  
3SEAMEO Biotrop

**0-39-10** CHALLENGES FOR IMPROVING BEEF SUPPLY WHERE LARGE RUMINANT REPRODUCTIVE MANAGEMENT IS ABSENT  
Russell David Bush, Nina Matsumoto, Sonevilay Nampanya, Syseng Khounsy, James Robert Young, Katherine Ashley, Peter Andrew Windsor  
1University of Sydney, Faculty of Veterinary Science,  
2Department of Livestock and Fisheries, Lao PDR

**Oral Session 40: Animal Nutrition (Ruminants) (4)**  
Thursday, 25 August 14:00-16:00 Room N302

**Chairs:** Lies Mira Yusiat Universitas Gadjah Mada  
Bachruddin Zaenal Universitas Gadjah Mada  
Jayanegara Anuraga Bogor Agricultural University

**O-40-1** ESTIMATION OF MICROBIAL PROTEIN SYNTHESIS BASED ON EXCRETION OF PURINE DERIVATIVES USING SPOT SAMPLING METHODE IN FAT-TAIL AND THIN-TAIL SHEEP  
Tutik Lusyta Aulyani, Lies Mira Yusiat, Budi Prasetyo Widyobroto, Zaenal Bachruddin, Chusnul Hanim  
Faculty of Animal Science, Universitas Gadjah Mada
**O-40-2** Effect of Fungal Treated Oil Palm Fronds in the Diet of Goats  
Pin Chanjula¹, Vasun Petchrat¹, Puwadon Hamchara¹, Anusong Cherdthong¹  
¹Prince of Songkla University

**O-40-3** Nutritional Status of Kacang Goats Fed Ruminally Undegradable Protein to Improve their Productivity  
A Kustantinah¹, Edwin Indarto¹, Rusman¹, I Gede Suparta Budisatria¹, Retno Adiwinarti²  
¹Universitas Gadjah Mada, Indonesia, ²Faculty of Animal Agriculture, Universitas Diponegoro, Indonesia

**O-40-4** Effects of replacing concentrate with wet soya milk residue on intake, digestibility and growth performance of goats  
Pattarapornt Tatsapong  
Naresuan University, Faculty of Agriculture, Natural Resources and Environment

**O-40-5** The Sodium nitrate addition in total mixture fermentation of tofu waste as ration on methane production of the rumen fluid  
Zaenal Bachruddin, Sifa Latiefah  
Gadjah Mada University

**O-40-6** Digestibility and Nitrogen Balance of Male Bligon and Kejobong Goat Fed Peanuts Straw  
Lies Mira Yusiati, Chusnul Hanim, Dianestu Putra  
Faculty of Animal Science, Universitas Gadjah Mada

**O-40-7** The comparison of nutrient digestibility of Bligon and Kejobong goats fed king grass and peanuts straw  
Chusnul Hanim, Lies Mira Yusiati, I Gede Suparta Budisatria, Fandi Widya Rachman  
Faculty of Animal Science, Universitas Gadjah Mada

**O-40-8** STUDY FOR DOMINANCE AND NUTRITION OF WEEDS AS FEED IN VARIOUS CROP LAND IN YOGYAKARTA  
Bambang Suwignyo, Nafiutul Umami, Nilo Suseno, Wahyudin Wahyudin, Bambang Suhartanto  
Faculty of Animal Science, Gadjah Mada University

**O-40-9** Effect of whole Krabok seed, krabok oil or krabok residue on in vitro methane production.  
Paiwan Panyakaew¹,², Thomas Schoneweille³, Chalermpoon Youaklang⁴, Wouter Hendriks¹,³  
¹Department of Animal Sciences, Wageningen University, The Netherlands, ²Department of Animal Science, Faculty of Natural Resources, Rajamangala University of Technology Isan, Sakon-Nakhon Campus, Thailand, ³Animal Nutrition division, Department of Farm Animal Health, Faculty of Veterinary Medicine, Utrecht University, The Netherlands, ⁴Department of Agricultural Technology and Environment, Faculty of Science and Liberal Arts, Rajamangala University of Technology-Isan, Thailand

**O-40-10** Determination of energy and protein requirements of sheep in Indonesia using a meta-analytical approach  
Anuraga Jayanegara, Muhammad Ridla, Erika B. Laconi, Nahrowi Nahrowi  
Department of Nutrition and Feed Technology, Faculty of Animal Science, Bogor Agricultural University, Indonesia
### Oral Session 41: Environment & Behaviour

**Chairs:** E Baliarti  
Faculty of Animal Science  
Kunio Sugahara  
Utsunomiya University

**0-41-2**  
**Effects of high ambient temperature on physiological responses and brain oxidative condition in growing chickens**  
Kunio Sugahara¹, So Satoh¹, Alam Mohammad Rashedul², Naohiro Nihei¹, Yoshizawa Fumiaki¹  
¹Utsunomiya University, ²Chittagong Veterinary and Animal Sciences University

**0-41-4**  
**Monitoring aggressive behavior of male Japanese Large Game (Oh-Shamo) chicks using resident-intruder test**  
Said Majdood Raihan¹, Atsushi Takenouchi¹, Masaoki Tsudzuki¹², Shin-Ichi Kawakami¹²  
¹Graduate School of Biosphere Science, Hiroshima University, ²Japanese Avian Bioresource Project Research Center, Hiroshima University

**0-41-5**  
**Beef Cattle Farmers Attitude towards Environmental and Socioeconomic Development in Yogyakarta Province**  
Siti Andarwati, Tri Anggraeni Kusumastuti, Gagah Radhitya Widiasena  
Faculty of Animal Science, Gadjah Mada University

**0-41-6**  
**BEHAVIOUR OF BALI CATTLE DURING GRAZING IN PALM OIL PLANTATION RIAU, INDONESIA**  
E Baliarti, B Suhartanto, M Hamdani, A Agus, J.G.S. Budisatria, Panjono, B Suwignyo, B Guntoro, Trisakti, S Bintara, Yuriadi, B A Atmoko, Y Galih, F Aryanti  
Universitas Gadjah Mada, Faculty of Animal Science, Indonesia

**0-41-7**  
**Effect of Fishery Related Activities on the Food and Nutrition Situation of Indigenous Community : A Study of Adolescent girl**  
Shireen Nigar¹, Takeshi Shimosato¹², Abu Torab Md. Abdur Rahim³  
¹Interdisciplinary Graduate School of Science and Technology, Shinshu University, ²Institute for Biomedical Sciences, Shinshu University, ³Institute of Nutrition and Food Science, Dhaka University

**0-41-8**  
**Design Build Purification Tubes With Alkaline Mineral Adsorbent As Improving The Quality Of Biogas As A source of Renewable Energy**  
Herwintono Radji  
Muhammadiyah University in Malang

**0-41-9**  
**The Use of Sodium Hydroxide As Adsorbent to improve biogas quality At different position of purification tube**  
Endang Sri Hartatie  
Muhammadiyah University in Malang

**0-41-10**  
**Performance of Hissar cattle (Bos indicus) in the Dry Tropics of Sumbawa, Eastern Indonesia**  
S H Dilaga, D Dahlanuddin  
Faculty of Animal Science University of Mataram, Indonesia
### Poster Session Program

#### Day 1: Tuesday, 23 August  [Kyushu Sangyo University]

**Poster Session 01**

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<tr>
<th>Poster Session 01</th>
<th>Tuesday, 23 August</th>
<th>Room Circle Hall</th>
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| **PO-01-1** Growth pattern of young progeny test steers and relationship between the carcass measurements in Japanese Black (Wagyu)  
Yousuke Kodama¹, Fortune Jomane², Kensuke Okuhata¹, Takumi Totsu¹, Takaomi Ishida¹, Tadaaki Tokunaga¹  
¹Faculty of Agriculture, University of Miyazaki,  
²Interdisciplinary Graduate School of Agriculture and Engineering, University of Miyazaki | 9:00-11:00 |
| **PO-01-2** The multiple regression analysis to estimate the unit price of Hanwoo (Bos taurus coreanae) meat  
Seung-hoon Eum, Hu-Rak Park, Jakyeom Seo, Seong-Keun Cho, Byeong-Woo Kim  
Dept. of Animal Science, Pusan National University, Korea | |
| **PO-01-3** ISOLATION AND ANALYSIS OF MICROSATELLITE MARKERS WITH HIGHLY POLYMORPHISM FOR TSAIYA DUCK POPULATIONS IN TAIWAN  
Fang-Yu Lai¹, Yi-Ying Chang², Pei-Hwa Wang¹, Hsiu-Chou Liu², En-Chung Lin¹, Shih-Torng Ding¹  
¹Department of Animal Science and Technology, National Taiwan University,  
²I-Lan Branch, Livestock Research Institute, Council of Agriculture | |
| **PO-01-4** MACHINE AND TECHNICIAN EFFECTS ON ULTRASOUND MEASURES OF BACKFAT, LOIN DEPTH, AND LONGISSIMUS MUSCLE AREA IN PUREBRED PIGS  
Chih-Yu Lin¹,², Ya-Chun Kang¹, Miao-Ju Chien¹, Pei-Mei Chen¹, Ling-Ling Lo¹  
¹Department of Animal Science, Chinese Culture University, Taiwan,  
²Department of Biotechnology and Animal Science, National Ilan University, Taiwan,  
³Department of Animal Industry, Council of Agriculture, Executive Yuan, Taiwan | |
| **PO-01-5** Comparison of the growth curve models of Hanwoo steer (Bos taurus coreanae)  
Hu-Rak Park¹, Seung-Hoon Eum¹, Seung-Hee Roh², Jakyeom Seo¹, Seong-Keun Cho¹, Byeong-Woo Kim¹  
¹Dept. of Animal Science, Pusan National University, Korea,  
²Hanwoo Improvement Center, NACF, Korea | |
| **PO-01-6** Efficiency of Genomic Selection to Improve Meat Quality in Pigs Using ZPLAN+  
Bryan Irvine Lopez, Vanessa Viterbo, Milton Tinashe Makumbe, Tae Hun Kim, Choul Won Song, Kang Seok Seo  
Sunchon National University | |
| **PO-01-7** Genetic evaluation of growth and carcass traits for those on-farm tested Duroc boars in 2014  
Ruei-Syuan Wu¹, Shu-Han Ding¹, Ling-Ling Lo², Shyh-Forng Guo³, Pei-Yu Lin⁴, Gui-Zhu Liu⁴, Pei-Mei Chen⁴, Neim-Tsu Yen⁵, Chong-Shu Wang⁵, Zhong-Xing Chen⁵, En-Chung Lin¹  
¹Department of Animal Science and Technology, National Taiwan University,  
²Department of Animal Science, Chinese Culture University,  
³Animal Technology Laboratories, Agricultural Technology Research Institute,  
⁴Formosan Farmers Association for Swine Improvement,  
⁵Council of Agriculture, Executive Yuan | |
PO-01-8  Identification of a Visual Appraisal Tool for Evaluating Pork Belly Quality in Yorkshire Pigs
Milton Tianshe Makumbe1,2, Hoon-Seop Kim1, Kang-Seok Seo1, Tae-Hun Kim1, Hyun-Sung Kang1, Chul-Won Song1, Vanessa Viterbo1, Bryan Lopez3
1 Department of Animal Science and Technology, Sunchon National University, Korea,
2 Department of Research and Specialist Services, Zimbabwe

PO-01-9  The effect of knockdown of IFNAR by RNAi on expression of IFN-τ induced genes in bovine endometrial epithelial cells
Takahiro Shirozu1, Toshiyuki Suzuki1, Hiroki Iwano1, Takatoshi Ogiso1, Hanako Bai1, Manabu Kawahara1, Koji Kimura1, Masashi Takahashi1
1 Research Faculty of Agriculture, Hokkaido University,
2 Graduate School of Environmental and Life Science, Okayama University

PO-01-10  Association of SNPs on the GH and PRL genes with egg production traits in Brown Tsaiya ducks
Kai-Hsiang Lin1, Yi-Ying Chang2, Hsiu-Chou Liu2, Jen-Chieh Yang1, Zhen-Ying Wu1, Yi-Chen Chen1
1 Department of Animal Science and Biotechnology, Tunghai University, Taiwan,
2 I-Lan Branch, Livestock Research Institute, Council of Agriculture, Taiwan

PO-01-11  Evaluation of Caprine POU1f1 Gene and Their Associations With Growth Traits of Nubian Goats
Po-An Tu1,2, Chiung-Ying Yin2, Pei-Hwa Wang2
1 Hengchun Branch, Livestock Research Institute, C.O.A., Taiwan,
2 Department of Animal Science and Technology, National Taiwan University

PO-01-12  Estimation of genetic parameters for stillbirth of Japanese Black cattle in Kagoshima
Hidemi Oyama1, Kazutaka Nishi2, Kiyoto Imamura3, Shinichi Sakamoto3, Kotaro Kawabe4, Shin Okamoto1, Takeshi Honda1, Kenji Oyama1, Takeshi Shimogiri1
1 Kagoshima University, Faculty of Agriculture,
2 Wagyu Registry Association, Kagoshima Branch,
3 Wagyu Registry Association, Kagoshima Branch,
4 Kagoshima University, Natural Science Centre for Research and Education,
5 Kobe University, Graduate School of Agricultural Science

PO-01-13  Effect of Days to Parturition and Locality of Hanwoo Pregnant Cows on Ultrasound Scan Measures by Parity
Chang Min Jeon, Jeong Mi Hwnag, Jae Kyoung Cheong, Young Kon Park, Tae Sung Kim, Joong Kook Park, Jae Yoon Shim, Ho Nam Choi, Dong Soo Lee
Livestock Research Institute, National Agriculture Cooperative Federation

PO-01-14  A comparison of metabolic parameters of plasma and muscle between healthy growing, healthy but stunted, and colibacillosis piglets
Takahiro Kawase1,3, Ryo Inoue2, Yuki Kawada2, Shozo Tomonaga4, Kiyonori Kawasaki5, Mitsuhiro Furuse4, Takamitsu Tsukahara1,2
1 Kyoto Institute of Nutrition & Pathology, Ujiitawara, Kyoto, Japan,
2 Laboratory of Animal Science, Graduate School of Life and Environmental Sciences, Kyoto Prefectural University, Japan,
3 Laboratory of Regulation in Metabolism and Behavior, Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University, Japan,
4 Laboratory of Nutritional Science for Animals, Division of Applied Biosciences, Graduate School of Agriculture, Kyoto University, Japan,
5 Laboratory of Animal Nutrition, Bioresource Production Science, Faculty of Agriculture, Kagawa University, Japan
PO-01-15  Differential Expression of Genes for Extracellular Matrix Molecules and Their Regulators in Longissimus Muscle between Korean Cattle Bulls and Steers
Seung Ju Park, Sang Weon Na, Myunggi Baik
Seoul National University

PO-01-16  JAK/STAT signaling pathway related genes differentially expressed in Necrotic Enteritis induced Fayoumi Chicken Lines
Anh Duc Truong¹, Yeojin Hong¹, Cong Thanh Hoang¹, Yeong Ho Hong¹, Hyun S Lillehoj²
¹Chung-Ang University, ²United States Department of Agriculture Beltsville, USA

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¹Graduate School of Agriculture, Tokyo University of Agriculture,
²Ome Center for Animal Husbandry, Tokyo Development Foundation for Agriculture, Forestry, and Fisheries,
³National Institute of Livestock and Grassland Science, NARO

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Hasina Sultana¹, Dong-Won Seo¹, Nu-Ri Choi¹, Kang-Nyeong Heo², Seung Hwan Lee¹, Jun-Heon Lee¹
¹Division of Animal and Dairy Science, Chungnam National University, Korea,
²Poultry Science Division, National Institute of Animal Science, RDA, Korea

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Takeshi SHIMOGIRI¹⁵
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²Institute of Animal Science,
³Primate Research Institute, Kyoto University,
⁴Natural Science Centre for Research and Education, Kagoshima University,
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²Tokyo University of Agriculture, Japan,
³KURABO, Japan,
¹Kagoshima University, Japan,
¹Tsukuba Gene Technology Laboratories Inc, Japan

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Kei Hanzawa¹
¹Tokyo University of Agriculture, ²Tokai University School of Medicine, ³Kanazawa University

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¹Graduate School of Biosphere Science, Hiroshima University, ²Faculty of Agriculture, Minia University, Egypt
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1 Graduate School of Biosphere Science, Hiroshima University, Japan, 2 Tokyo University of Agriculture, Japan, 3 Shiga Prefectural University, Japan, 4 KURABO, Japan, 5 Kagoshima University, Japan, 6 Irriomote Station, Tropical Biosphere Research Center University of the Ryukyus, Japan, 7 National Institute of Agrobiological Sciences, Japan, 8 Tsukuba Gene Technology Laboratories Inc, Japan

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1 Graduate School of Biosphere Science, Hiroshima University, 2 Japanese Avian Bioresource Project Research Center, Hiroshima University

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1 Hiroshima University Graduate School of Biosphere Science, 2 KURABO INDUSTRIES LTD., 3 National institute of Agrobiological Sciences, 4 Tsukuba Gene Technology Laboratories Inc.

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1 Animal Physical Division of Council of Agriculture-Livestock Research Institute, 2 Department of Animal Science, National Pingtung University of Science and Technology

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1 Faculty of Agriculture, Iwate University, 2 United Graduate School of Aguricultural Sciences, Iwate University

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1 Faculty of Agriculture, Iwate University, 2 United Graduate School of Agricultural Sciences, Iwate University

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1 Hiroshima University, 2 China Agricultural University

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1 Laboratory of Animal Reproduction, United Graduate School of Agricultural Sciences, Iwate University, 2 Laboratory of Animal Reproduction, Graduate School of Agricultural Science, Yamagata University

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1 Faculty of Agriculture and Marine Science, Kochi University, 2 Institute of Livestock and Grassland Science, NARO, 3 Department of Mechatronics Engineering, Meijo University, 4 Miyagi Prefectural Livestock Experiment Station, 5 University of Teramo

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1 Faculty of Agriculture and Marine Science, Kochi University, 2 Institute of Livestock and Grassland Science, NARO, 3 Department of Mechatronics Engineering, Meijo University, 4 Miyagi Prefectural Livestock Experiment Station

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1 Taiwan Livestock Research Institute, Council of Agriculture, 2 National Chiayi University

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1 Graduate School of Agriculture, University of Miyazaki, 2 Faculty of Agriculture, Tokai university, 3 Faculty of Agriculture, University of Miyazaki

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1 Rakuno Gakuen University School of Veterinary Medicine, 2 Scientific Feed Laboratory co., Ltd., 3 Veterinary Clinical Center, Ishikari district NOSAI Hokkaido

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1 Tohoku University Graduate School of Agricultural Science, 2 Tohoku University Graduate School of Medicine
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³Faculty of Veterinary Medicine, Chiang Mai University

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⁴East Japan Guide Dog Association, Japan

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⁴Department of Genetics and Animal Breeding, Faculty of Veterinary and Animal Science, Hajee Mohammad Danesh Science and Technology University, Bangladesh

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¹Department of Animal Science, National Chung Hsing University,
²Department of Food Science, Tung Hai University

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2 College of Agro-bioresources, University of Tsukuba, Japan,
3 Faculty of Life and Environmental Science, University of Tsukuba, Japan

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Khushdil Maroof1, Takao Oka1, Mika Fujihara2, Norikazu Hashimoto3, Takashi Bungo1

1 Graduate School of Biosphere Science, Hiroshima University,
2 Wakayama Prefectural Poultry Experimental Station

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Tzu Hsiang Wei, Bi Yu, Tzu Tai Lee

Department of Animal Science, National Chung Hsing University, Taiwan

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Chong-Ming Huang1, Po-Yun Teng1, Shen-Chang Chang2, Bi Yu1, Tzu-Tai Lee1

1 Department of Animal Science, National Chung Hsing University, Taiwan,
2 Changhua Animal Propagation Station, Livestock Research Institute, Council of Agriculture, Taiwan

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Shiau-Wei Chen1, Jih-Tay Hsu1, Wei-Yuan Shih2, Han-Tsung Wang2

1 Department of Animal Science and Technology, National Taiwan University,
2 Department of Animal Science, Chinese Culture University

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State Key Laboratory of Animal Nutrition, Ministry of Agriculture Feed Industry Centre, China Agricultural University, China

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Tsung-Hsuan Rau1, Je-Ruei Liu1,2

1 National Taiwan University School of Animal Science,
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Shu-Cheng Chen1, Yi-Hua Huo1, Ruey-Shyang Chen2, Kuo-Lung Chen1

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2 Department of Biochemical Science and Technology of National Chiayi University

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Yu-Hsuan Lee, Nattapon Sirirat, Tu-Fa Lien, Kuolung Chen

Department of Animal Science, National Chiayi University, Taiwan
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¹Hiroshima University, ²Wakayama Prefectural Poultry Experimental Station

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Ayaka Honma¹, Kazumi Kita²  
¹Iwate University Graduate School of Agriculture, ²Iwate University Faculty of Agriculture

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Yu-Chun Lin¹,², Fang-Chueh Liu¹, Chien-Hsun Huang³  
¹Livestock Research Institute, Council of Agriculture, Executive Yuan, Taiwan, ²Department of Animal Science and Technology, National Taiwan University, Taiwan, ³Bioresource Collection and Research Center, Food Industry Research and Development Institute, Taiwan

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¹Kagawa University, Faculty of Agriculture, ²Biomaterial in Tokyo Co., Ltd

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Yoko Murata¹, Itaru Minagawa¹,², Ali Mohammad Pitia¹,², Hiroyuki Sukigara¹, Masatoshi Shibata³, Hiroshi Sasada⁴, Kazuyoshi Hashizume⁵, Tetsuya Kohsaka¹,²
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³Shizuoka Swine and Poultry Experimental Station, Japan,
⁴Laboratory of Animal Reproduction, School of Veterinary Medicine, Kitasato University, Japan,
⁵Laboratory of Veterinary Physiology, Faculty of Agriculture, Iwate University, Japan

PO-01-75  Rapid Identification of 4 Enterococcus Species using PCR Based on Genome Comparison.

Jongbin Park¹, Gwi-Deuk Jin², Jae In Pak²,³, Eun Bae Kim²,³
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³Division of Applied Animal Science, College of Animal Life Sciences, Kangwon National University

PO-01-76  Effect of dissolved air flotation on dairy wastewater treatment by laboratory and pilot plant experiments

Min-Chien Cheng¹,², Mei-Ping Cheng¹, Ting-Hsun Hsiao¹,², Tein-Ming Su¹, Tzong-Faa Shiao², Hsin-I Chiang²
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Junichi Ishikawa¹,², Hideki Kinoshita³, Mai Jumonji³, Moe Hariu³, Ayuko Yoshida³, Ken Watanabe³, Kohei Watanabe³, Naomi Sasaki³, Hisahiro Nakai¹, Toshikazu Komoda¹, Yoshihito Suda³, Mitsuharu Ishida³
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²Industrial Technology Institute, Japan, ³Tokai University School of Agriculture, Japan

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Orya Rafiullah¹,², Nobuo Saito², Shoko Tabata¹, Nassary Nooragha¹, Yuki Nakagawa¹, Genki Ishigaki¹, Kiichi Fukuyama¹, Ikuo Kobayashi³
¹Sumiyoshi Livestock Science Station, University of Miyazaki, ²Nishii Co. Ltd., ³Mitsui Chemicals, Inc.

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HyunSeong Kim, SeongJu Jeon, Jisu Lee, Umanthi Ranaraja, ChangHee Do
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Faculty of Veterinary Medicine, Mahanakorn University of Technology, Thailand

PO-01-81  Availability of Lactobacillus salivarius strain isolated from piglet feces as probiotic uses

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<td>Yukiko Iwamoto¹, Akane Iwasa¹, Yu Takenaka¹, Mitsuharu Urabe¹, Yasuo Takemura¹, Shuji Sakamoto², Takuma Higuchi³, Katsuji Morioka¹, Kazuma Sakibuchi³, Yutaka Ishida³, Kazutsugu Matsukawa¹</td>
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<td>¹Faculty of Agriculture and Marine Science, Kochi University,</td>
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<td>³Shikoku Research Institute Inc.</td>
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<td>Phoebe Lyndia Llantada, Gerry Pilien, Rosalina Lapitan, Arnel Del Barrio, Tsutomu Fujihara, Daniel Aquino</td>
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<td>Philippine Carabao Center</td>
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Fumiya Nakamura1, Matoki Sanada1, Ryuichi Hayashi1, Yoshimasa Imai1, Tomoyo Inoue1, Shinji Ohta2, Hiroyuki Kawachi1
1Nagahama Institute for Bioscience and Technology, 2Hiroshima University

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Yoshimasa Imai1, Yoshihiro Yamada1, Matoki Sanada1, Fumiya Nakamura1, Tomoki Hayashi1, Shinji Ohta2, Hiroyuki Kawachi1
1Nagahama Institute for Bioscience and Technology, 2Hiroshima University

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Kei Nishimura1, Kohzy Hiramatsu2, Takaumi Watanabe2, Ryosuke Makino1, Naoko Sasaki3, Kazumi Kita3
1Interdisciplinary Graduate School of Science and Technology, Shinshu University, 2Faculty of Agriculture, Shinshu University, 3Faculty of Agriculture, Iwate University

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1Graduate school of Agriculture, Shinshu University, 2Interdisciplinary Graduate School of Science and Technology, Shinshu University, 3National Agriculture and Food Research Organization (NARO), 4Institute for Biomedical Sciences, Shinshu University

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1Kitasato University School of Veterinary Medicine, 2Faculty of Education, Art and Science Yamagata University

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School of Animal Production Technology, Institute of Agricultural Technology, Suranaree University of Technology, Thailand

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1Department of Animal Science, National Chung Hsing University, 2Graduate Institute of Basic Medical Science, China Medical University, 3Medical Research Department, China Medical University Hospital, 4Department of Bioinformatics and Medical Engineering, Asia University

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Ataru Kimura1, Hiroyuki Suzuki2, Masatoshi Matsuzaki2
1United Graduate School of Agricultural Sciences, Iwate University, 2Faculty of Agriculture and Life Science, Hirosaki University
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Tomonori Nakanishi³  
¹Graduate School of Agriculture, University of Miyazaki,  
²Department of Biochemistry and Applied Biosciences, Faculty of Agriculture, University of Miyazaki,  
³Department of Animal and Grassland Sciences, Faculty of Agriculture, University of Miyazaki

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Takuma Nishigawa¹, Mayumi Takakura¹, Satsuki Nagamachi¹, Vishwajit S Chowdhury², Shinobu Yasuo¹,  
Mitsuhiro Furuse¹  
¹Laboratory of Regulation in Metabolism and Behavior, Faculty of Agriculture, Kyushu University,  
²Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University

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¹Graduate School of Agriculture, Ibaraki University,  
²United Graduate School of Agricultural Science, Tokyo University of Agriculture and Technology

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Kyushu University Graduate School of Agriculture

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Miyu Yamashita¹, Shotaro Nishimura¹, Takane Kaneko¹, Fuminori Kawabata², Shoji Tabata²  
¹Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University,  
²Faculty of Agriculture, Kyushu University

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Rika Fukumori¹,², Yoshikazu Nagano¹,²  
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⁴Collaboration Center for Research and Development of Utsunomiya University, Japan

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Nanjing Agricultural University

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¹Tokyo University of Agriculture and Technology, ²Utsunomiya University

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Kyohei Furukawa¹, Natsumi Waki¹, Motoi Kikusato¹, Akane Ashihara¹, Aiko Ishida¹, Kazuki Nakashima¹,  
Masaaki Toyomizu¹  
¹Animal Nutrition, Life Sciences, Graduate School of Agricultural Science, Tohoku University,  
²Animal Physiology and Nutrition Division, NARO Institute of Livestock and Grassland Science

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Kei Matsuno¹,², Takuya Matsumoto¹, Toshiyoshi Ichinohe¹, Sang-Houn Song¹  
¹Faculty of Life and Environmental Science, Shimane University, Japan,  
²The United Graduate School of Agricultural Sciences, Tottori University, Japan
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Shiro Kushibiki⁴, Taketo Obitsu¹
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³Showa Denko K. K., Japan,
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Takuya Matsumoto¹, Kei Matsuno¹,², Toshiyoshi Ichinoh⁴, Sang-Hoon Song¹
¹Faculty of Life and Environmental Science, Shimane University, Japan,
²The United Graduate School of Agricultural Sciences, Tottori University, Japan

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Yuki Hakamata¹, Motoi Kikusato¹, Kouichi Watanabe², Taku Amo³, Masaaki Toyomizu¹
¹Animal Nutrition, Life Sciences, Graduate School of Agricultural Science, Tohoku University,
²Animal Functional Morphologic, Life Sciences, Graduate School of Agricultural Science, Tohoku University,
³Department of Applied Chemistry, National Defense Academy

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Department of Animal Life and Environmental Science, Hankyong National University, Korea

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Department of Animal Science, National Chung Hsing University, Taiwan

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²Ilan Branch, Livestock Research Institute, Council of Agriculture, Executive Yuan,
³Livestock Research Institute, Council of Agriculture, Executive Yuan

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Yuta Imade¹, Tetsuya Kondo², Yumi Kayahara³, Khosyo Yamauchi³, Peter Lutes¹, Yoshiki Matsumoto¹
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³Kagawa Prefecture Livestock Experimental Station, ⁴Miyazaki Midori Pharms. co.ltd.

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Jiraroj Nithisantawakhupt, Pussadee Tangwatcharin, Nahathai Vijitrothai
Department of Animal Production Technology and Fisheries, Faculty of Agricultural Technology, King Mongkut’s Institute of Technology Ladkrabang, Thailand
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2 Faculty of Agricultural Technology, King Mongkut's Institute of Technology Ladkrabang,
3 Faculty of Industrial Education, King Mongkut's Institute of Technology Ladkrabang,
4 Department of Livestock Development, Thailand

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1 Faculty of Agriculture and Marine Science, Kochi University,
2 Science Research Center, Kochi Medical School, Kochi University,
3 Shikoku Research Institute Inc.

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Nasution Syahrizal1, Pratidina Iskandar Rhey2, Adam Alfath Muhammad3, Farida Nok1, Yusrina Kulsum Anita1
1 Animal Product Technology, Animal husbandry Faculty of Universitas Padjadjaran,
2 Physics Major, Mathematics and Natural Sciences Faculty of Universitas Padjadjaran,
3 Chemistry Major, Mathematics and Natural Sciences Faculty of Universitas Padjadjaran

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1 University of Dalat, 2 Vietnam National University of Agriculture

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Yanan Zhao1, Masahiro Nishida1, Yusuke Nakada1, Shuji Ueda1, Masaaki Habara2, Hidekazu Ikezaki2, Minoru Yamanoue1
1 Graduate School of Agricultural Science, Kobe University, Japan, 2 INSENT, Japan
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1 Taiwan Chung Hsing University of Biological Technology, 2 Taiwan Formosa University of Animal Science

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1 Kangwon National University, 2 National Institute of Animal Sciences

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Yusuke Takai1, Misato Kawai1, Tadashi Ogo2, Takashi Ichinose2, Shigeki Furuya2, Hiroshi Udo3, Mitsuhiro Furuse1  
1 Laboratory of Regulation in Metabolism and Behavior, Faculty of Agriculture, Kyushu University, 2 Division of Systems Biology, Faculty of Agriculture, Kyushu University, 3 Department of Science, Kyushu University

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1 Graduate School of Science and Technology, Niigata University, 2 Faculty of Agriculture, Niigata University, 3 Field Center for Sustainable Agriculture and Forestry, Niigata University

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1 Laboratory of Regulation in Metabolism and Behavior, Faculty of Agriculture, Kyushu University, Japan, 2 Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University, Japan

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Hiroshima University

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Kenta Sakakura1, Yusuke Eguchi1,2, Soichiro Doyama2, Hironori Ueda2, Katsuki Uetake2, Toshio Tanaka1  
1 Azabu University School of Veterinary Medicine, 2 NARO Western Region Agricultural Research Center

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Sumiyoshi Livestock Science Station, University of Miyazaki

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Ka young Yang1, Gie Won Kim1, Jae Jung Ha2, Yong Han Song1  
1 College of Animal Life Science, Kangwon National University, 2 Gyeongsangbuk-do Livestock Research Institute
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Shi-Ying Lin¹, Yen-Pai Lee¹, Chi-Feng Chen¹,²,³, Chao-Jung Chen⁴, San-Yuan Huang¹,²,⁶
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²Agricultural Biotechnology Center, National Chung Hsing University,
³Center for the Integrative and Evolutionary Galliformes Genomics, iEGG Center, National Chung Hsing University,
⁴Proteomics Core Laboratory, Department of Medical Research, China Medical University Hospital,
⁵Graduate Institute of Integrated Medicine, China Medical University,
⁶Center of Nanoscience and Nanotechnology, National Chung Hsing University

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Yuta Sonoda¹, Kazato Oishi¹, Hajime Kumagai¹, Yoshikazu Aoki², Hiroyuki Hirooka¹
¹Graduate School of Agriculture, Kyoto University, ²Shiga Prefectural Livestock Technology Promotion Center

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THI MINH NGUYEN¹, Thi Minh Thu Pham², Martine Boulianne³
¹Animal Husbandry Association of Vietnam (AHAV), ²National Institute of Animal Science (NIAS), Vietnam,
³Faculty of Veterinary Medicine, University of Montreal, Canada

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Mio Yamaguchi¹,², Sarentonglaga Borjigin³, Kazuko Ogata²,³, Asuka Hara¹,², Akane Sato¹,², Rika Fukumori¹,², Nagao Yoshikazu¹,²
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²University Farm, Department of Agriculture, Utsunomiya University, Japan,
³Collaboration Center for Research and Development, Utsunomiya University, Japan

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Shin Taeg Kyun, Samiru Sudharaka Wickramasuriya, Eunjoo Kim, Hyun Min Cho, Hyunmin Lee, Jaehong Yoo, Jung Min Heo
Chungnam National University

PO-02-68 Effect of five crossbreed strains on growth performance of Korean domestic chickens from week 8 to week 12
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Makiko Odaka1, Kazumasa Ogino2, Kenichi Asada1, Syoujirou Kasa1, Michitaka Shikada3, Takahiro Inoue4, Ken Maeda5
1 Fukuoka Agriculture and Forestry Research Center, 2 University of Occupational and Environmental Health, 3 Fukuoka Prefectural Yame Agricultural High School, 4 Fukuoka Prefectural Fukuoka Agricultural High School, 5 Yamaguchi University

PO-02-70 Gene regulation of small yellow follicles in response to acute heat stress in L2 strain Taiwan country chickens
Chuen-Yu Cheng1, Wei-Lin Tu1, Chih-Feng Chen1,2,3, Hsin-Hsin Chen1, Pin-Chi Tang1,2,3, Yen-Pai Lee1, Shuen-Ei Chen1,2,3, San-Yuan Huang1,2,3,4
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Wei-Lin Tu1, Chuen-Yu Cheng1, Chao-Jung Chen1,2,3, Hong-Lin Chan1,2,3, Chih-Feng Chen1,2,3, Hsin-Hsin Chen1, Pin-Chi Tang1,2,3, Yen-Pai Lee1, Shuen-Ei Chen1,2,3, San-Yuan Huang1,2,3,4
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PO-02-72 Establishment of a chicken embryonic stem cell line from stage X chicken embryos
Hsiao-Yun Kuo1,2, Wei-Jun Yang1, Lih-Ren Chen1, Yow-Ling Shiue2
1 Livestock Research Institute, Taiwan, 2 Institute of Biomedical Sciences, National Sun Yat-sen University, Taiwan

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Wei Li Chen, Shirley Gee Hoon Tang, Mohammad Fasaleh Jahromi, Idrus Zulkifli, Juan Boo Liang
Institute of Tropical Agriculture, Universiti Putra Malaysia

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Azusa Naka, Masaya Maruyama, Minami Nakama, Shuji Ueda, Minoru Yamanoue
Laboratory of Chemistry and Utilization of Animal Products, Graduate School of Agricultural Science, Kobe University, Japan

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Yuriko Nishio1, Yuichi Ushimura1, Shiji Ueda1, Naoyuki Maeda2, Akihito Hattori3, Minoru Yamanoue1
1 Laboratory of Chemistry and Utilization of Animal Products, Graduate School of Agricultural Science, Kobe University, Japan, 2 Safety Research Institute for Chemical compounds Co., LTD, Japan, 3 Japan Meat Science and Technology Institute, Japan
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Sumiyoshi Livestock Science Station, University of Miyazaki

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Nanjing Agriculture University

PO-02-78 Effect of potential probiotics on alleviating chronic kidney disease progression using cisplatin-induced Lanyu porcine model  
Pin-Jhu Wang¹, Chen-Yu Fang², Ming-Ju Chen¹  
¹Department of Animal Science and Technology, National Taiwan University, ²Conmed Pharmaceutical & Bio-Medical Corporation

PO-02-79 Antiviral activities of intestinal probiotics  
Hsiu-Han Hsu¹, Je-Ruei Liu²  
¹National Taiwan University of Animal Science, ²National Taiwan University of Institute of Biotechnology

PO-02-80 Influence of Lactobacillus rhamnosus GG on modulation of gut microbiota, leptin sensitivity and energy metabolism in diet-induced obesity mice  
Yu-Chieh Cheng¹, Je-Ruei Liu¹²  
¹Department of Animal Science and Technology, National Taiwan University, ²Institute of Biotechnology, National Taiwan University

PO-02-81 A Whole Genome Association Analysis for serum and milk β-hydroxybutyric acid and milk acetone in Holstein cows  
Jisu Lee¹, ChangHee Do¹, Umasani Ranaraja¹, Taejung Choi², Sidong Kim², KwangHyun Cho²  
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Siriwadee Phromnoi¹, Somkiat Dontongdang²  
¹Faculty of Science and Technology. Uttaradit Rajabhat University, Thailand

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Kenichi Nagai¹, Gaku Tahara¹, Isao Hyodo², Sadao Kojima², Hisashi Usugi², Koh Nomura¹, Yukimizu Takahashi³, Eiji Kobayashi¹³, Tsutomu Furukawa¹  
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Punnares Rattanapradit¹, Suphawadee Yaemkong¹, Norakamol Larorodphan¹, Prapasisri Jaipong¹, Rangsun Charoensook², Tossaporn Incharoen², Sonthaya Numthuam², Nawannaporn Chirarat³, Usaneeporn Soipeth³  
¹Pibulsongkram Rajabhat University, ²Naresuan University, ³Rajamangala University of Technology Lanna Phitsanulok
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Yaemkong Suphawadee1, Nguyen Ngoc Tuan2
1Pibulsongkram Rajabhat University, 2Vietnam National University of Agriculture

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Akin Yakan1, Huseyin Ozkanz, Aysel Eraslan Sakar2, Necmettin Unal1, Ceyhan Ozbeyaz3
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2Department of Genetics, Faculty of Veterinary Medicine, University of Mustafa Kemal, TURKEY,
3Department of Animal Science, Faculty of Veterinary Medicine, University of Ankara, TURKEY

PO-03-6  Damascus Goats’ LTF Gene Expression Levels in Milk Somatic Cell at Different Feeding Systems
Aysel Eraslan Sakar1,2, Akin Yakan1, Huseyin Ozkanz, Ceyhan Ozbeyaz3, Necmettin Unal1
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2Department of Genetics, Faculty of Veterinary Medicine, University of Mustafa Kemal, TURKEY,
3Department of Animal Science, Faculty of Veterinary Medicine, University of Ankara, TURKEY

PO-03-7  Goat Milk Somatic Cell PPARγ Gene Expression Levels in Concentrate Based and Pasture based Feeding Systems
Huseyin Ozkanz1,2, Akin Yakan1, Aysel Eraslan Sakar2, Necmettin Unal1, Ceyhan Ozbeyaz3
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2Department of Genetics, Faculty of Veterinary Medicine, University of Mustafa Kemal, TURKEY,
3Department of Animal Science, Faculty of Veterinary Medicine, University of Ankara, TURKEY

PO-03-8  Somatometrical comparison on the morphological relationships between red jungle fowl, native fowl and their hybrid populations in Thailand
Kotaro Kawabe1, Rerkammuaychoke Worawut2, Takao Nishida3, Takeshi Shimogiri3, Satoru Taura1, Shin Okamoto3
1Institute of Gene Research, Natural Science Research Centre for Research and Education, Kagoshima University,
2Faculty of Veterinary Medicine, Kasetsart University, 3Faculty of Agriculture, Kagoshima University

PO-03-9  Pre and Post Weaning Growth Performance of 50% Bore-Native and 50% Anglonubian-Native Crossbred Goat
Sukrat Phanom, Pirom Buakeaw, Suwit Anothaisinthawee
Department of livestock development

PO-03-10  Genetic influence of HNF4α gene SNP on the growth performance in Korean native chickens.
Seon hyang Kim, So-young Choi, Song-yi Yang, Sung-Jin Lee
Kangwon National University

PO-03-11  Genetic variations in the Ovocalyxin-32 gene are associated with egg production traits in Korean native chickens
Ji-Ho Choi, So-Young Choi, Song-Yi Yang, Sung-Jin Lee, Ji-Yeon Lee
Kangwon National University

PO-03-12  Effect of the amino acid change in the Japanese quail NK-lys in (CJNK) on antimicrobial activity
Ishige Taichiro, Hiromi Hara, Takashi Hirano, Kei Hanzawa
Tokyo University of Agriculture

PO-03-13  Survey on the population structure and reproductive performance of feral cattle of Kuchinoshima island in Japan
Misao Kanemaki
Institute for Animal Science
PO-03-14 Development of an NMR scanner for the marbling quantification of live cattle
Yoshito Nakashima
National Institute of Advanced Industrial Science and Technology

PO-03-15 Effects of Napier grass and Thapra Stylo silages with different levels of concentrate on milk production of dairy cows
Smerjai Bureenok¹, Kraisit Vasupen¹, Chalermpoon Yuangklang¹, Benya Saenmahayak¹,
Kessara Ampaporn²
¹Rajamangala University of Technology Isan, ²Rajamangala University of Technology Isan, Sakon Nakhon Campus

PO-03-16 Effect of Level of Cassava Pulp in Fermented Total Mixed Ration on Feed intake and Nutrient digestibility in Goats
Songsak Chumpawadee¹, Sukanya Leetongdee²
¹Division of Animal Science, Faculty of Technology, Mahasarakham University, Thailand,
²Department of Bioprocessing, Faculty of Veterinary medicine, Mahasarakham University, Thailand

PO-03-17 Additive effects on fermentation quality of fermented juice (from oil palm fronds) of epiphytic lactic bacteria
Chanadda Phawachalotorn, Thanatsamonwan Phonmun
King Mongkut’s Institute of Technology Ladkrabang Prince of Chumphon Campus, Thailand

PO-03-18 Influence of age on oil palm fronds quality as roughage for ruminants
Thaworn Subanrat, Orasa Choola-Aiet¹, Suparat Jongjaraen, Patimawan Manit,
Thanatsamonwan Phonmun
King Mongkut’s Institute of Technology Ladkrabang Prince of Chumphon Campus, Thailand

PO-03-19 Effect of fermented juice of epiphytic lactic acid bacteria (FJLB) levels on quality of oil palm fronds silage
Thanatsamonwan Phonmun, Phakanong Pattarapudech, Thaworn Subanrat
King Mongkut’s Institute of Technology Ladkrabang Prince of Chumphon Campus, Thailand

PO-03-20 Diurnal changes in the methane concentration in the rumen headspace of cannulated cattle
Y. K. Oh¹, Y. W. Woo², C. H. Lee³, Y. Lee³, K. H. Kim³
¹Department of Animal Nutrition and Physiology, National Institute of Animal Science, RDA, Korea,
²Graduate School of International Agricultural Technology, Seoul National University, Korea,
³Green Bio Science and Technology, Seoul National University, Korea

PO-03-21 Effects of Dietary Supplementation with Andrographis paniculata, Turmeric and Vitamin E on Growth Performance and Meat Quality of Goat
Nantana Chauychuwong, Ratchasak Chauychuwong, Keatisak Soisuwan
Rajamangala University of Technology Srivijaya

PO-03-22 INFLUENCE OF ARTOCARPUS LACUCHA MEAL SUPPLEMENTATION ON STRAW BASED DIETS USING IN VITRO GAS FERMENTATION TECHNIQUE
Nirawan Gunun¹, Pongsatorn Gunun¹, Sudarat Tanpronsri¹, Phailin Pongsathet¹, Patraphol Jabal¹,
Nattthapong Jumphakaew¹, Panchan Prachanan¹, Pimphaka Doovisas¹, Suksa Robroo¹,
Kannika Opatwong¹, Aleeya Promnoy², Anusorn Cherdthong⁴, Metha Wanapat¹
¹Program in Animal Production Technology, Faculty of Technology, Udon Thani Rajabhat University, Thailand
**PO-03-23** The improving nutritional value of banana tree using microorganism on digestibility of beef cattle using in vitro gas production technique  
Sineenart Polyorach¹,², Onanong Pongchompuang¹, Metha Wanapat³, Thanousinh Kandee⁴, Wanida Tongsalab¹, Waraporn Chaitamat¹  
¹Department of Animal Science, Faculty of Natural Resources, Rajamangala University of Technology-Isan, Sakon Nakhon Campus, Thailand,  
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³Tropical Feed Resources Research and Development Center, Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand,  
⁴Department of Animal Science, Faculty of Agriculture and Forest Resource, Souphanouvong University, Lao PDR

**PO-03-24** In vitro Gas Production Kinetics and Digestibility as Influenced by Spent Coffee Grounds and Napier Grass Varieties  
Pongsatorn Gunun, Nirawan Gunun, Metha Wanapat, Sineenart Polyorach, Charong Wachirapakorn, Promkot Chamnanwit, Paiwan Panyakaew, Kannika Opatawong, Aleeya Promnoy, Thanousinh Kandee, Yontida Singson, Thanapron Ouppamong, Sirisuda Sirilaophaisan  
Department of Animal Science, Faculty of Natural Resources, Rajamangala University of Technology-Isan, Sakon Nakhon Campus, Thailand

**PO-03-25** Effects of Lactobacillus plantarum on the nutritive value of TMR prepared mainly Italian Ryegrass silage for lactational dairy cows  
Donghyun Lim, S.B. Park, S.H. Choi, T.I. Kim, K.S. Ki  
National Institute of Animal Science

**PO-03-26** Effect of feeding garlic leaves on rumen fermentation, methane production and glucose metabolism in sheep  
Arvinda Panthee¹, Ayano Matsuno², Mohammad Al-Mamun³, Hiroaki Sano¹,²  
¹The United Graduate School of Agricultural Science, Iwate University, ²Dept. of Animal Science, Iwate University, ³Dept. of Animal Nutrition, Bangladesh Agricultural University

**PO-03-27** Effects of dietary protein levels on digestibility, nitrogen-balance and growth performance of fattening black goat (Capra hircus coreanae)  
Byong Tae Jeon¹, Se Young Jang¹, Sung Jin Kim¹, Hye Jin Seong¹, Sang Woo Kim², Yu Ling Ding¹, Yu Jiao Tang¹, Yeong Sik YUN¹  
¹Division of Food Bio Science, Konkuk University, Korea, ²Nation Institute of Animal scidnce, RDA, Korea

**PO-03-28** Effect of Thyme Essential oil and Di-sodium Fumarate on In Vitro Ruminal Nutrient Disappearance and Partitioning Factor  
Baraz Hiwa, Hossein Jahani-Azizabadi, Osman Azizi  
Department of Animal Science, Faculty of Agriculture, University of Kurdistan, Iran

**PO-03-29** Combination of sunflower oil and nitrate on metabolizable energy, methane production and rumen fermentation of goats  
Pramote Paengkoun¹, Jirawan Khotsakdee¹, Siwaporn Paengkoun²  
¹Suranaree University of Technology, ²Nakhon Ratchasima Rajabhat University

**PO-03-30** Effect of glucosinolate (Sinigrin) for reducing methane emission rumen parameters and microbial community in vitro  
Taeho Song¹, Ahreum Choi¹, Guiseck Bae¹, Eunjoong Kim², Changhyun Kim², Moonbaek Chang¹  
¹Chung-Ang university, ²Kyungpook National University, ³Hankyong National University

**PO-03-31** Replacement of corn silage for sugarcane silage diets on rumen metabolism in buffalo  
Raul Franzolin¹, Teresa Cristina Alves², José Raúl López Álvarez³, Thaysa dos Santos Silva¹, Orlando Fundora Sánchez¹  
¹Universidade de Sao Paulo-FZEA, Brazil, ²EMBRAPA - Pecuaria Sudeste, Brazil, ³Instituto de Ciencia Animal, Cuba
PO-03-32 Effect of low-crude protein diet with rumen-protected Lysine supplementation for energy and nitrogen metabolism in lactating cow
Kouji Higuchi1, Fumihiro Ohtani1, Itoko Nonaka1, Takashi Osada1, Atsushi Haruno2, Yasuteru Sakamoto2, Takeshi Fujieda3
1Institute of Livestock and Grassland Science, NARO,
2AJINOMOTO Co., Inc., Research Institute for Bioscience Products and Fine Chemicals

PO-03-33 Effect of methionine on energy metabolism in sheep with ruminal ethanol infusion
Taketo Obitsu1, Keita Hosoba1, Mabrouk El-Sabagh1,2, Toshihisa Sugino1
1Graduate School of Biosphere Science, Hiroshima University,
2Faculty of Veterinary Medicine, Kafrelsheikh University

PO-03-34 Effect of Adding Lysozyme at Different Inclusion Levels on In Vitro Rumen Fermentation
Ashraf Biswas, Lovelia Mamuad, Catherine Avedoza, Seong Soo Jang, Jae Won Yoon, Min Gyu Kim, Maro Go, Sang Suk Lee
Department of Animal Science and Technology, Sunchon National University, Korea

PO-03-35 Effects of bacillary probiotic (Bacillus subtilis C-3102) in spore form on the growth performance and intestinal immunity of heat-stressed broiler
Motoi Kikusato1, Fumika Nanto1, Takuma Ishikawa1, Nobuhisa Ashida2, Tomokazu Imabayashi2, Masaaki Toyomizu1
1Animal Nutrition, Life Sciences, Graduate School of Agricultural Science, Tohoku University,
2ASAHI CALPIS WELLNESS Co., Ltd.

PO-03-36 Effects of different forage and growth stage on adipogenesis of ovine preadipocytes
Sang-Houn Song1, Da-Hye Kim1,2, Ki-Choon Choi1, Takuya Matsumoto1, Kei Matsuno1,2, Toshiyoshi Ichinohe1
1Faculty of Life and Environmental Science, Shimane University, Japan,
2The United Graduate School of Agricultural Sciences, Tottori University, Japan,
3Grassland and Forage Division, National Institute of Animal Science, RDA, Korea

PO-03-37 Changes in Gut Microbiota in Japanese Black and Holstein Calves during Growing Stage
Thuy Minh Tang1, Yusuke Sugimoto2, Yuji Tanabe2, Takeshi Tsuruta1, Naoki Nishino1
1Okayama University, 2Okayama Livestock Research Institute

PO-03-38 Evaluation of the Commercial Direct-Fed Microbial in Inhibition of E. coli and In Vitro Fermentation using Calves Fecal Slurry
Catherine Avedoza, Lovelia Mamuad, Yeon Jae Choi, Ashraf Biswas, Suzy Lim, Maro Lee, Sang-Suk Lee
Department of Animal Science and Technology, Sunchon National University, Korea

PO-03-39 Effect of stabilizer on methane mitigation efficiency of encapsulated nitrate in rumen fermentation
Su-Jin Shin1, Henry Ajuna1, Jinho Yang1, Chaehwa Ryu1, Bitna Choi1, Sangbuem Cho1, Nag-Jin Choi1
1Department of Animal Science, Chonbuk National University, 2Institute of CALS, CALS Co. Ltd

PO-03-40 Optimization of submerged fermentation of Bacillus subtilis for surfactin production
Yeong-Hsiang Cheng, Ching-Wen Chang, Yu-Hsiang Yu
Department of Biotechnology and Animal Science, National Ilan University

PO-03-41 Applying fermented juice of epiphytic lactic acid bacteria (FJLB) powder as probiotics in weaned pig
Kraisit Vasupen, Chalermporn Yangklang, Sasiphan Wongsuthavas, Benya Saenmahayak, Smerjai Bureenok
Faculty of Sciences and Liberal Arts, Rajamangala University of Technology Isan
PO-03-42  Effects of Various Corn particle size under optimal and heat stress condition on Nutrient Utilization in pigs
Ji-hwan Lee, Chang Hee Lee, Won Yun, Seo Yuong Oh, Jin Ho Cho
Chungbuk National University

PO-03-43  Evaluation of fermented whole wheat and barley feeding as ingredients in growing pigs
Won Yun, Seong Jeong Park, Ji Hwan Lee, Seo Young Oh, Chang Hee Lee, Jin Ho Cho
Chungbuk National University

PO-03-44  Effect of Heat-killed Lactobacillus plantarum L-137 on The Growth Performance and Productivity in Hinai-jidori Chicken (Slow-growing Japanese meat-type chicken)
Kazuhiro Rikimaru1,2, Yoshitaka Hirose2, Hiroko Nakai2, Daiki Takahashi1, Yuki Sato1, Hironobu Hase3
1 Akita prefectural Livestock Experiment Station, 2 Research and Development Institute, House Wellness Foods Corporation,
3 Lactobacillus product ingredients business department, House Wellness Foods Corporation

PO-03-45  Production functional feed additive using Antrodia cinnamomea fermented soybean hull
Lee Tzu-Tai1, Lin H. C.1, Chang S. C.1, Yu B.1
1 Department of Animal Science, National Chung Hsing University,
2 Changhua Animal Propagation Station, Livestock Research Institute, Council of Agriculture

PO-03-46  Effect of Rhizopus fermentation Extract on Sexual Characteristics and Sperm Production in Male Japanese Quail
Yu Teng Lan1, Stephanie Chen1, Yu Ming Liao2, Mei Fong Lin1
1 National Taiwan University, 2 National Taipei University of Technology

PO-03-47  The using of fermented vegetable soybean waste and banana stem in Black-bone chicken diets
Tonglain buwjoom1, Buaream Maneewan1, Koh-en Yamauchi2
1 Faculty of Animal Science and Technology, Maejo University, Thailand
2 Faculty of Agriculture, Kagawa University, Miki-cho, Japan

PO-03-48  Dietary peat moss as a regulator of breast meat quality in broilers
Yang-Ho Choi1,2, Seok-Min. Kang2, Young-Rok Yang2, Dae-Woo Kim1
1 Department of Animal Science, Gyeongsang National University, Korea,
2 Institute of Agriculture and Life Sciences, Gyeongsang National University, Korea,
3 Division of Applied Life Sciences (BK21 Plus program), Gyeongsang National University, Korea

PO-03-49  Effect of Supplementation of an Alternative Sweetener to Diets on Feed Intake and Growth Performance of Piglets
M.L. He1,3, H.F. Wang1, X.D. Wang1, X.X. Dou1, J.L. Wang2
1 Zhejiang Agricultural and Forestry University, 2 Zhejiang Gomore Feed Co. Ltd.,
3 Lucta (Guangzhou) Flavours Co. Ltd.

PO-03-50  Effect of Supplement Truffle Flavor and Umami to Diet on Feed Intake, Lactation Performance and Backfat Thickness of Lactating Sows
Y. Zhang1,2, F.F. Li1, X. Zhang1, M.L. He2
1 Shenyang Agricultural University, 2 Lucta (Guangzhou) Flavours Co. Ltd.

PO-03-51  IMPROVED THERMOSTABILITY OF ASPERGILLUS SULPHUREUS Xylanase BY COMBINATION OF INTRODUCING DISULFIDE BOND AND PROLINE RESIDUE SUBSTITUTION
YUNHE CAO, Wenhan Yang, Xiaojing Guo, Bing Dong
College of Animal Science and Technology, China Agricultural University
PO-03-52 The effect of dietary Aspergillus on growth performance and immune response in growing-finishing pigs
Chuan-Shun Lin
Agricultural Technology Research Institute

PO-03-53 Evaluating the application of animal and plant oils and high acid value rendering oil in broiler feeds
Kuo-Lung Ku¹, Cheng-Yang Chuang¹, Cheng-Wei Wang², Kuo-Lung Chen²
¹Department of Applied Chemistry, National Chiayi University, Taiwan,
²Department of Animal Science, National Chiayi University, Taiwan

PO-03-54 Effect of dietary supplementation of mixed feedstuffs fermented by Bacillus sp. L6 on performances of broilers
Kuo-Lung Chen, Weng-Keong Lo
Department of Animal Science, National Chiayi University, Taiwan

PO-03-55 Fermented feather meal from steam drying process can promote the growth and immunity of broilers
Ping-Hung Lin, Feng-Chan Tsai, Kuo-Lung Chen
Department of Animal Science, National Chiayi University, Taiwan

PO-03-56 The improvement of growth performance and antioxidant ability in broilers using the additives with herbs and fungal complexes in diets
Chi-Shih Chu¹, Lin-Ping Huang², Kuo-Lung Chen²
¹Department of Microbiology, Immunology and Biopharmaceuticals, National Chiayi University, Taiwan,
²Department of Animal Science, National Chiayi University, Taiwan

PO-03-57 The influence of green-tea-byproduct meal levels in the accumulation of fat and cholesterol in yolk from Japanese quail
Hen-Wei Wei¹, Chen-Chun Wei¹, Min-Syh Chiou², Yi-Cheng Lee³, Chian-Kai Chang³
¹National Taiwan University, ²Tea Research and Extension Station, ³Li Han Enterprise Corporation Limited

PO-03-58 Effects of dietary resources in high antioxidant activity on broiler chickens.
Koichi Matsushita¹, Toshiyuki Ishii², Takumi Iwama³, Yuko Hirose³
¹Yamanashi Prefecture Livestock Experimental Station, ²Yamanashi Prefecture Agritechnology Center,
³Yamanashi University

PO-03-59 The effects of feeding wet shochu distillers residue to fattening pigs on behavior and sensory traits of pork loin
Sachi Katsumata¹, Misako Kamakura¹, Seira Isojima¹, Ikuo Kobayashi¹², Satoshi Kawahara¹², ShinSuke Sakamoto¹, Mitsuhiro Niimi¹, Toshihiro Takahashi¹², Tomoyuki Kawashima¹²
¹University of Miyazaki Faculty of Agriculture,
²University of Miyazaki Center for Animal Disease Control

PO-03-60 Distribution of β-carboline Derived from Tryptophan in Chickens
Ryosuke Makino¹, Kazumi Kita²
¹Fac. of Agric., Ehime Univ., ²Fac. of Agric. Iwate Univ.

PO-03-61 Evaluation of Lesser Galangal (Alpinia Officinarum Hance) as Antibiotic Feed Additive in Performance, Carcass Quality and Health Status of Swine
Tai Nang Nguyen, Van Cao, Hoang Lam Dang
Hungvuong University
PO-03-62  Effect of radioactive cesium on Japanese black cows grazing on decontaminated pastures
Hirotoshi Ishiguro1, Yousuke Saito1, Satoshi Watanabe1, Takashi Numabe1, Masatoshi Suzuki2,
Yasushi Kino1, Manabu Fukumoto1
1 Miyagi Prefecture Livestock Experiment Station, Japan, 2 Department of Pathology, Institute of Development, Aging and Cancer, Japan

PO-03-63  Anatomy and morphology of hyperostosis in Genus Caranx and Genus Alectis, from Anadaman sea, Thailand
Waristha Angsirijinda1, Ekthida Thongdet1, Watiporn Yenchum2
1 Mahanakorn University of Technology, 2 National Institute of Metrology (Thailand)

PO-03-64  Presence of proliferating cell nuclear antigen (PCNA) positive cell clusters in the uropygial gland of the jungle crow Corvus macrorhynchos
Atsushi Hirao1, Koya Sasaki2, Shoei Sugita2
1 Jichi Medical University School of Nursing, 2 Utsunomiya University Department of Animal Science

PO-03-65  Stimulatory action of L-aspartic acid on growth hormone secretion in the anterior pituitary of wethers
Tatsuyuki Takahashi1, Atsuko Saito1, Mao Fujimura1, Makoto Sugiyama1, Hideki Ogawara1,
Katsuyoshi Sato2, Yohei Kurose1
1 Kitasato University School of Veterinary Medicine, 2 Department of Agribusiness, Akita Prefectural University

PO-03-66  Zinc sulfate pretreatment impacts the testicular antioxidant capacity and the acrosome biogenesis in Bama miniature pig under high ambient temperature
ChunMei Li, Yansen Li, Yun Cao, Xin Zhou, Zhaojian Li
Nanjing Agricultural University

PO-03-67  Changes in expression of CAT-1 and CAT-2 mRNA during myogenesis
Aiko Ishida, Kazuki Nakashima
Institute of Livestock and Grassland Science, NARO

PO-03-68  Adipocyte Differentiation Induced by Indomethacin and 3-Isobutyl-1-methylxanthine in Mammary Stromal Cells of Retired Mice in Primary Culture
Takuya Kanazawa, Kenji Fujimata
Ibaraki University School of Agriculture

PO-03-69  Restraint stress increases salivary corticosterone levels in adult male mice.
Atsushi Tohei, Masakatsu Nohara, Takumi Sato, Hiromi Amao
Laboratory of Experimental Animal Science, Nippon Veterinary and Life Science University

PO-03-70  Weeding Effect of Free-Ranging Pigs in an Abandoned Paddy Field Dominated by Solidago altissima L.
Koji Takayama1, Mako Matsunaga1, Haruko Matsunaga1, Naoki Nogami2, Ichiro Oshima1,
Yoshitaka Nakanishi1
1 Faculty of Agricultural, Kagoshima University, 2 Nogami Co., Ltd

PO-03-71  Myogenic stem cells isolated from soleus muscle may autonomously form slow-twitch fibers via Sema3A signaling.
Takahiro Suzuki1, Yu-ki Ohya2, Shin-ichiro Nishimatsu3, Kumiko Terada1, Naoki Katase1, Hideaki Ohtsubo2,
Wataru Mizuno5, Ken Kobayashi1, Tsutomu Nohno3, Nishimura Takanori1, Ryuichi Tatsumi2
1 Research Faculty of Agriculture, Graduate School of Agriculture, Hokkaido University, 2 Department of Animal & Marine Bioresource Science, Graduate School of Agriculture, Kyushu University,
3 Department of Molecular and Developmental Biology, Kawasaki Medical School
PO-03-72 Difference in circulating microRNAs between grazing and concentrate-fed Japanese Black cattle
Susumu Muroya\textsuperscript{1}, Masayuki Hayashi\textsuperscript{1}, Koichi Ojima\textsuperscript{1}, Mika Oe\textsuperscript{1}, Ikuyo Nakajima\textsuperscript{1}, Masahiro Shibata\textsuperscript{2}
\textsuperscript{1}NARO Institute of Livestock and Grassland Science, \textsuperscript{2}NARO Western Region Agricultural Center

PO-03-73 Molecular Detection Of Anaplasma maginale In Cows In The Eastern Border Area
Kanokrat Srikijkasemwat\textsuperscript{1}, Paitoon Kaewhom\textsuperscript{2}
\textsuperscript{1}Department of Animal Production Technology and Fisheries, Faculty of Agricultural Technology, King Mongkut’s Institute of Technology Ladkrabang, Thailand,
\textsuperscript{2}Faculty of Agricultural Technology, Burapha University, Sakaeo Campus, Thailand

PO-03-74 Rapid discrimination of Bacillus subtilis group using MALDI-TOF MS technology
Chien-Hsun Huang\textsuperscript{1}, Ting-Jen Chuang\textsuperscript{1}, Lina Huang\textsuperscript{1}, Kuo-Lung Chen\textsuperscript{2}
\textsuperscript{1}Bioresource Collection and Research Center, Food Industry Research and Development Institute,
\textsuperscript{2}Department of Animal Science, National Chiayi University

PO-03-75 Effect of blended essential oil components on anti-biofilm formation of Salmonella and Escherichia coli
Seo Young Oh, Won Yun, Ji Hwan Lee, Chang Hee Lee, Jin HO Cho
Chungbuk National University

PO-03-76 Prevalence of Trypanosoma evansi Infection among Cattle and Buffalo from Sa Kaeo Province, Eastern Border Area of Thailand-Cambodia
Paitoon Kaewhom\textsuperscript{1}, Kanokrat Srikijkasemwat\textsuperscript{2}
\textsuperscript{1}Faculty of Agricultural Technology, Burapha University, Sakaeo Campus, Thailand,
\textsuperscript{2}Department of Animal Production Technology and Fisheries, Faculty of Agricultural Technology, King Mongkut’s Institute of Technology Ladkrabang, Thailand

PO-03-77 Effects of Irrigation of Dairy Wastewater at Napiergrass Pasture on the Soil and Plant Qualities
Chu Hsin Liu\textsuperscript{1}, Lu Chi Hsin\textsuperscript{2}, Cheng Mei Ping\textsuperscript{1}
\textsuperscript{1}Management Division, Livestock Research Institute, \textsuperscript{2}Forage Crops Division, Livestock Research Institute

PO-03-78 Safety evaluation and application of the aerobic ultrahigh temperature fermented compost
Chun-Xiang PIAO\textsuperscript{1}, Junyou LI\textsuperscript{2}, Zheng-Yu PIAO\textsuperscript{1}, Guang-Chun LI\textsuperscript{1}, Chang-Guo YAN\textsuperscript{1}
\textsuperscript{1}Department of Agricultural Resources and Environment, Agricultural College of Yanbian University, China,
\textsuperscript{2}Animal Resource Science Center, Graduate School of Agricultural and Life Sciences, The University of Tokyo, Japan

PO-03-79 Virucidal efficacy of slaked lime and charcoal ash against Newcastle disease virus and Avian influenza virus
Sakchai Ruenphet\textsuperscript{1}, Darsaniya Punyadarsaniya\textsuperscript{2}, Tippawan Jantafong\textsuperscript{3}
Mahanakorn University of Technology

PO-03-80 Sulfur-oxidizing bacterial communities in cattle manure compost
Yumi Mori, Chika Tada, Yasuhiro Fukuda, Yutaka Nakai
Tohoku University Graduate School of Agricultural Science
Day2: Wednesday, 24 August  [Kyushu Sangyo University]

**Poster Session 04**

**Wednesday, 24 August  9:00-11:00  Room Circle Hall**

**PO-04-1**  Effects of Adding Bacillus subtilis in StarterMixture for Growth Performance and Blood Traits in Lambs  
Ssu-yu Chen, Hsin-tai Hong, Chean-ping Wu  
National Chiayi University

**PO-04-2**  Effects of Growth and Blood Traits in Lambs Fed Milk Replacers Containing Probiotics  
Chun-yun Wu, Hsin-tai Hong, Chean-ping Wu  
National Chiayi University

**PO-04-3**  Differentially methylated CpG sites in bull sperm DNA revealed by human DNA methylation arrays  
Kumiko Takeda¹, Eiji Kobayashi¹, Satoshi Akagi¹, Masahiro Kaneda², Shinya Watanabe¹  
¹ Institute of Livestock and Animal Science, NARO, ² Tokyo University of Agriculture and Technology

**PO-04-4**  The effects of dietary addition of whole crop sugar-rich rice silage on the fertility of postpartum suckling Japanese Black cows  
Kazunaga Oshima¹, Yuji Goto¹, Kimiyasu Takahashi², Koichi Katayose¹, Yasushi Ono¹, Masashi Kagawa¹, Yosinori Ochial¹, Kazunori Tawara¹, Yoshitake Watanabe¹, Chihiro Kawakami¹, Takashi Akagi¹, Koichi Kishimoto¹, Koji Fukuma¹, Ichiro Otani¹, Naoyuki Yamamoto¹  
¹ NARO Western Region Agricultural Research Center (Oda), ² NARO Western Region Agricultural Research Center (Fukuyama)

**PO-04-5**  The Effect of Pentoxifylline Supplementation on Sperm Quality of Frozen Semen in Thai Indigenous Chickens (Chee)  
Chanyuth Thamwan, Kedsirin Sakwiwatkul, Chakrapong Chaikong, Jatuprom Khakhanmalee, Areerat Lertkitjaluk  
Mahasarakham University

**PO-04-6**  Establishment and preservation of embryonic stem cells from Onagadori  
Teruo Maeda¹,²,³, Qian Sun¹, Ryo Ezaki¹, Hiroyuki Horiuchi¹  
¹ Graduate School of Biosphere Science, Hiroshima University, ² Japanese Avian Bioresource Project Research Center, Hiroshima University, ³ The Research Center for Animal Science, Hiroshima University

**PO-04-7**  Improvement in the post-thaw qualities of Okinawan native Agu pig spermatozoa treated with skim milk and Trolox prior to cryopreservation  
Hideki Tatemoto¹, Ryuko Mitsube², Isao Tokeshi³, Minami Uehara¹, Yuki Sadoyama¹, Mina Funabiki¹, Toshihiro Konno¹  
¹ Faculty of Agriculture, University of the Ryukyus, ² Okinawa Prefectural Livestock Research Center

**PO-04-8**  Concentration-dependent effects of glucose on frozen-thawed bovine sperm motility and viability  
Yousuke Naniwa, Masashi Kinukawa, Shohei Toda, Kyoko Uchiyama  
Livestock Improvement Association of Japan, Inc.

**PO-04-9**  Attempt on the establishment of somatic cell nuclear transfer method in Japanese quail  
Shusei Mizushima¹, Tamao Ono², Tomohiro Sasana³  
¹ Graduate School of Science and Engineering for Research, University of Toyama, Japan, ² Division of Animal Science, Faculty of Agriculture, Shinshu University, Japan, ³ Department of Applied Biological Chemistry, Faculty of Agriculture, Shizuoka University, Japan
PO-04-10  Enzyme-linked immunosorbent assay for bovine super-early pregnancy factor
Kazuei Matsubara, Kouki Kanamori, Yuka Motoyama, Kanako Koizumi, Hiroshi Yoshida,
Kosuke Iga, Manabu Shimizu, Toh-ichi Hirata
1Graduate School of Agriculture, Iwate University,
2National Livestock Breeding Center, Iwate station (NLBC Iwate station),
3General incorporated association Kuzumaki-machi Chikusan Kousha public corporation,
4Tohoku Agricultural Research Center, National Agriculture and Food Research Organization (NARO)

PO-04-11  Seasonal variation of dog semen quality and freezability
Kazuko Ogata, Aiko Sasaki, Borjigin Sarentonglaga, Mio Yamaguchi, Asuka Hara,
Akane Sato, Kenji Nishihara, Naoko Sugane, Rika Fukumori, Yoshikazu Nagao
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2University Farm, Faculty of Agriculture, Utsunomiya University, Japan,
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PO-04-12  Effects of pretreatment with resveratrol on the quality of post-thaw cryopreserved bovine embryos
Takeshi Hayashi, shuji Ueda, Miyuki Mori, Harumi Ono, Hisataka Iwata
1Fukuoka Agriculture and Forestry Research Center, 2Tokyo University of Agriculture

PO-04-13  The effects of glycerol on the maturational and developmental potential of porcine oocytes
Yasuhiro Tsuzuki, Keishi Gohara, Yoshihiro Hayashi, Koji Ashizawa
University of Miyazaki, Faculty of Agriculture

PO-04-14  Effects of near-infrared laser irradiation on the in vitro development of mouse embryos
Masaki Yokoo, Miho Mori, Kurara Saga
Faculty of Bioresource Sciences, Akita Prefectural University

PO-04-15  Zfp207 is a Bub3 binding protein regulating meiotic chromosome alignment in mouse oocytes
Bo Xiong, Xiaoxin Dai, Mianqun Zhang, Shaochen Sun
Nanjing Agricultural University

PO-04-16  Both high-fat diet and gene mutation induced obesity affect oocyte quality in mice
Shao-Chen Sun
Nanjing Agricultural University

PO-04-17  Effect of seasons on aspects of in vitro embryo production in Japanese Black cattle
Takashi Saiki, Yuki Kawachi, Hiideki Tsuchiya, Motoharu Miyamura, Seizo Hamano
Livestock Improvement Association of Japan, Inc.

PO-04-18  Preliminary Study of Ovulation Induction by Low Dose of eCG and Timed Artificial Insemination with hCG in Swamp Buffalo
Adisak Sangkaew, Chaibat Jarassaeng, Sarawut Sri-ngam, Saksiri Sirisathien, Seri Khang-air
1Department of Surgery and Theriogenology, Faculty of Veterinary Medicine, Khon Kaen University,
2Department of Veterinary Public Health, Faculty of Veterinary Medicine, Khon Kaen University

PO-04-19  Effects of Sericin Supplementation on Cryopreserved sperm survival of Thai Native Chicken
Thevin Vongpralub, Pachara Thananurak, Napapach Chuaychu-noo, Saennumphung Somtaw,
Nalinee Tubtimtong, Pronjit Sornseeda
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2Research and Development Network Center for Animal Breeding (Native chicken), Faculty of Agriculture, Khon Kaen University, Thailand
PO-04-20 Factors affecting DNA damage in bovine spermatozoa after freeze drying
Kazutsugu Matsukawa1, Mana Nitta1, Toshinori Oikawa1, Shinnoosuke Tamura1, Mami Hosokawa1,
Aoi Kono1, Satoshi Akagi1, Akihiko Ichikawa1, Keisuke Edashige1
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2Miyagi Prefectural Livestock Experiment Station,
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4Department of Mechatronics Engineering, Meijo University

PO-04-21 Direct exposure of retinoic acid induces meiotic differentiation of cultured chicken primordial germ cells
Daichi Miyahara1,2, Nozomi Kurumisawa2, Tamao Ono2, Hiroshi Kagami1, Takahiro Tagami1
1Institute of Livestock and Grassland Science, NARO, 2Faculty of Agriculture, Shinshu University

PO-04-22 Regulation of sperm capacitation by molecules present in the female oviduct
Masakatsu Fujinoki
Dokkyo Medical University School of Medicine

PO-04-23 Both estrone and estriol non-genomically suppress luteinizing hormone secretion from the bovine anterior pituitary cells via the estradiol receptor GPR30
Kadokawa Hiroya, Otsuka Midori
Yamaguchi University

PO-04-24 Melamine impairs female fertility via suppressing protein level of Juno in mouse eggs
XiaoXin Dai
Nanjing Agricultural University

PO-04-25 The effect of continuous measurement of vaginal temperature as an indicator of calving time in Japanese Black cows
Miki Sakatani1, Takaaki Sugano2, Aiki Higo1, Koji Naotsuka2, Satoru Gessei4, Takuo Hojo1, Hiroshi Uehara2,
Naoki Takenouchi1
1Kyushu Okinawa Agricultural Research Center, NARO, 2NTT DOCOMO, 3Kimotsuki Daichi Farm,
4JA Kagoshima Kimotsuki

PO-04-26 Sperm Pretreatment with Dithiothreitol (DTBA) Increased Developmental Competence of Bovine Oocytes after ICSI
Tayita Suttirojpattana1,2, Tamas Somfai3, Satoko Matoba2, Takashi Nagai4, Rangsun Parnpai2,
Masaya Geshi2,4
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PO-04-27 Effect of Cdc42 inhibitor on maturation rate of mouse cumulus and denuded oocytes during in vitro maturation
Mohamed El-Sharawy1,2, Asami Tanaka1, Hikaru Suyama1, Md. Rashedul Islam1,3, Nobuhiko Yamauchi1
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2Animal Production Department, Faculty of Agriculture, Kafrelsheikh University, Egypt,
3Department of Genetics and Animal Breeding, Faculty of Veterinary and Animal Science, Hajee Mohammad Danesh Science and Technology University, Bangladesh

PO-04-28 GONADAL DEVELOPMENT IN GERMLINE CHIMERIC CHICKENS TRANSFERRED BY HETEROSEXUAL PRIMORDIAL GERM CELLS
Hiroki Furuta, Yuki Ichikawa, Kaho Kaneda, Ai Kojima, Yuka Yokoi, Tatsuyuki Yoshida
Nippon Veterinary and Life Science University
PO-04-29 Induction of autoimmune orchitis in goat with syngeneic sperm for male immunocontraception
Junko Noguchi\textsuperscript{1}, Shinya Watanabe\textsuperscript{2}, Kazuhiro Kikuchi\textsuperscript{1}, Hiroyuki Kaneko\textsuperscript{1}
\textsuperscript{1}Institute of Agrobiological Sciences, NARO, \textsuperscript{2}Institute of Livestock and Grassland Science, NARO

PO-04-30 The effect of the grazing grass species on the meat quality grade of the beef carcass in Japan
Makoto Kaneko, Yoshi-Nori Nakamura, Ryoji Kobayashi
NARO Kyushu Okinawa Agricultural Research Center

PO-04-31 Pre-fusion Treatment with Phytohemaglutinin-P (PHA-P) Increases Relative Expression of Mitochondria Related Genes in Somatic Cell Nuclear Transfer Embryos in Pig
Ndubuisi Samuel Machebe\textsuperscript{1,2,3}, Masaki Hata\textsuperscript{1}, Kohei Arifuku\textsuperscript{1}, Yurika Narumiya\textsuperscript{1}, Yuki Itani\textsuperscript{1}, Kazuki Ohata\textsuperscript{1}, Tetsuya Tani\textsuperscript{1}, Yoko Kato\textsuperscript{1}\
\textsuperscript{1}Laboratory of Animal Reproduction, Kinki University, Japan, \textsuperscript{2}JSPS Postdoctoral Fellow for Foreign Researchers, \textsuperscript{3}Department of Animal Science, University of Nigeria

PO-04-32 Round-bale Silage Harvesting and Processing Effects on Dry Matter Yield, Overwintering Ability, Fermentation Quality, and Palatability of Dwarf Napiergrass
Satoru Fukagawa\textsuperscript{1}, Kenichi Kataoka\textsuperscript{1}, Yasuyuki Ishii\textsuperscript{2}\
\textsuperscript{1}Nagasaki Agricultural and Forestry Technical Development Center, \textsuperscript{2}Faculty of Agriculture, University of Miyazaki

PO-04-33 Utilisation of Sunnhemp (Crotalaria juncea) as Roughage Source in beef cattle
Pipat Lounglawan\textsuperscript{1}, Supreena Srisaikham\textsuperscript{1}, Pitunart Noosen\textsuperscript{2}\
\textsuperscript{1}School of Animal Production Technology, Institute of Agricultural Technology, Suranaree University of Technology, Thailand, \textsuperscript{2}Department of Animal Science, Faculty of Natural Resources, Prince of Songkla University, Thailand

PO-04-34 Evaluation of incorporating an improved Leucaena forage for grass-fed beef production in a tropical ecosystem
Glen K. Fukumoto\textsuperscript{1}, Yong Soo Kim\textsuperscript{1}, Perry Kealoha\textsuperscript{2}\
\textsuperscript{1}University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources, \textsuperscript{2}Kamehameha Schools

PO-04-35 Evaluation of Palatability for Crop Species and Conserving Methods in Korean Native Cattle
Jong Geun Kim\textsuperscript{1,2}, Yu Wei Li\textsuperscript{1}, Meing Joong Kim\textsuperscript{1}, Han Jong Ko\textsuperscript{1,4}, Hyung Soo Park\textsuperscript{1,4}, Hak Jin Kim\textsuperscript{3}, Suk Im Jeong\textsuperscript{2,4}\
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PO-04-36 Forage selection of tropical forage legume species by Japanese Black cattle
Manabu Tobisa\textsuperscript{1}\
\textsuperscript{1}Faculty of Agriculture, University of Miyazaki

PO-04-37 The application of chemical pretreatment on digestibility improvement of domestic alternative forage - an in vitro fermentation evaluation
Han-Tsung Wang\textsuperscript{1}, Shiau-Wei Chen\textsuperscript{2}, Jih-Tay Hsu\textsuperscript{2}\
\textsuperscript{1}Department of Animal Science, Chinese Culture University, \textsuperscript{2}Department of Animal Science and Technology, National Taiwan University
PO-04-38  Effect of Lactic Acid Bacteria and Temperature on the Fermentation Quality of Total Mixed Ration for Ruminants
Suyeon Kim¹, Kihwan Lee¹, Tabita Dameria Marbun¹, Juhui Kang¹, Jaeyong Song¹, Sangbuem Cho², Eun Joong Kim¹
¹Department of Animal Science, Kyungpook National University, Korea, ²Institute of Circulation Agriculture and Livestock Solutions, CALS Co., Ltd, Korea

PO-04-39  Effects of providing fatty acid–calcium soap with high oleic acid content on fatty acid composition in Japanese Black steers
Nobutada Sakagami, Hiroyuki Tsuji, Shinji Hashimura, Kiyoshi Akiyama, Kentaro Orihara
Kanagawa Prefectural Livestock Industry Technology Center

PO-04-40  Effects of lactic acid bacteria inoculation and wilting on silage fermentation of nilegrass silage
Bi Yu, Pin-Rou Huang, Geng-Jhen Fan, Tzu-Tai Lee
Department of Animal Science, National Chung Hsing University, Taiwan

PO-04-41  Carcass Commercial Cuts Percentage of Ram Raised Under Different Energy-Protein Ratio Feeding and Different Slaughtered Weight
Endang Purbowati, Rega Dianzha Yudha, Edy Rianto
Diponegoro University, Faculty of Animal and Agricultural Sciences

PO-04-42  Production performance and plasma metabolites in Japanese Black and Holstein crossbred steers offered fed silage- based total mixed ration
Hirotaka Kasuya, Tetushiro Endo, Waka Saito, Ooi Tomoki, Soichi Kageyama
Hokkaido Research Organization Animal Research Center

PO-04-43  Improvement of the Quality of Air-dried Rice Straw by Ensiling with Acidic Solution and Cellulase
Xinbao Liu, Yixin Shen
Nanjing Agricultural University

PO-04-44  Nutritive Value and Silage Quality of Sweet Sorghum as Influenced by Nitrogen Fertilization Rate and Harvest Time
Yixin SHEN
Nanjing Agricultural University

PO-04-45  Breeding of Napiergrass（Pennisetum purpureum）Taisu no.6
Jeng-Bin Lin¹, Tzu-Rung Li¹, Shyh-Rong Chang¹, Chi-Hsin Lu¹, Churung-Faung Lee¹, Yih-Min Shy¹, Shu-Fen Yan¹, Hsi-Hsun Wu¹, Yu-Kuei Cheng¹
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PO-04-46  Physical and Growth Characteristics of Japanese ‘Kuchinoshima Feral Cattle’, a Native Cattle Breed
Ichiro Oshima¹, Yuki Chikara², Akira Tominaga¹, Daiki Yanagita¹, Daisuke Ishii¹, Satoshi Matsumoto¹, Kiyomi Katahira¹, Koji Takayama¹, Yoshitaka Nakanishi¹
¹Faculty of Agriculture, Kagoshima University, ²The United Graduate School of Agricultural Sciences, Kagoshima University

PO-04-47  Fermentation of rumen content from abattoir waste using different level of additives and different fermentation period
MARJUKI MARJUKI
Faculty of Animal Husbandry, Brawijaya University, Indonesia
PO-04-48  Fermentation quality of Tropical Grasses Silage treated with Lactic acid bacteria and Cellulase  
Waroon Khota\textsuperscript{1}, Suradej Pholsen\textsuperscript{1}, Yimin Cai\textsuperscript{2} 
\textsuperscript{1}Faculty of Agriculture, Khon Kaen University, Thailand,  
\textsuperscript{2}Institute of Livestock and Grassland Science (NILGS), NARO, Japan

PO-04-49  Silage fermentation of natural grasses in meadow steppe and typical steppe  
Meiling Hou\textsuperscript{1}, Gentu Ge\textsuperscript{1}, Tingyu Liu\textsuperscript{2}, Yushan Jia\textsuperscript{1}, Yimin Cai\textsuperscript{3} 
\textsuperscript{1}Inner Mongolia Agricultural University, \textsuperscript{2}Inner Mongolia University of Nationalities,  
\textsuperscript{3}National Institute of Livestock and Grassland Science

PO-04-50  Effect of molasses and cellulase on the silage fermentation of kudzu, sugarcane top and their mixture  
Xinzhu Chen\textsuperscript{1}, Wenyang Li\textsuperscript{1}, Yifen Zhuang\textsuperscript{2}, Boqi Weng\textsuperscript{1}, Yimin Cai\textsuperscript{3} 
\textsuperscript{1}Fujian Academy of Agricultural Sciences, \textsuperscript{2}Fujian Agriculture and Forest University,  
\textsuperscript{3}National Institute of Livestock and Grassland Science

PO-04-51  Influence of a Rice Whole Crop Silage Diet during the Hot Season on Growth Performance and Gene Expression in Steers.  
Masahiro Shibata, Yasuko Hikino, Kazunori Matsumoto, Naoyuki Yamamoto  
Western Region Agricultural Research Center, NARO

PO-04-52  Effects of two nitrogen sources on plant height, yield and nutritive value of Napier grass grown on terraced hill  
Ramli Bin Abdullah, Mohammad Mijanur Rahman, Wan Embong Wan Khadijah  
Institute of Biological Sciences, Faculty of Science, University of Malaya

PO-04-53  Study of fermentation quality and in situ rumen degradability of kudzu silage  
Kenichi Horiguchi, Misako Yamamoto, Hiroki Matsuyama, Syuji Urakawa, Norio Yoshida,  
Toshiyoshi Takahashi  
Faculty of Agriculture, Yamagata University

PO-04-54  Evaluation of Protein Utilization from Broken Job’s tears and Job’s tears bran in Weanling Pigs  
Chaiyapruek Hongladdaporn, Sawang Kullawong, Suthasinee Kruttaga  
Loei Rajabhat University

PO-04-55  Super-Dosing Effect of Dietary Phytase on Laying Performance and Egg Quality in Laying Hens  
Jong Hyuk Kim, Ji Eun Shin, Gi Ppeum Han, Dong Yong Kil  
Chung-Ang University

PO-04-56  Dietary Supplementation of Activated IGF-I during Gestation and Lactation Affects Sow and Piglet Performance  
Francis Carlo Reyes\textsuperscript{1}, Anthony Francis Regaspi\textsuperscript{1}, Emily Angeles\textsuperscript{1}, Jose Karlo Cardona\textsuperscript{1},  
Medallaine Dimaiwat\textsuperscript{1}, Joel Thaddeus Aldemita\textsuperscript{1}, Veneranda Magpantay\textsuperscript{2}, Soleil Cabigting\textsuperscript{3},  
Niño Jesus Bagui\textsuperscript{2}, Baby Helen Briones\textsuperscript{2}, Lucilo Plata\textsuperscript{2}, Brett Casebolt\textsuperscript{4} 
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\textsuperscript{3}Soro-soro Ibaba Development Corporation, Philippines,  
\textsuperscript{4}Gbh Laboratories, Llc., USA

PO-04-57  Effect of sodium butyrate supplementation in milk replacer on growth and blood parameters in lambs  
Hsin-tai Hong, Chean-ping Wu  
National Chiayi University
PO-04-58 Effects of Energy Values Evaluated by Supplementation of Lysophospholipids on Growth Performance and Nutrient Digestibility in Growing Pigs
MinJu Kim, Abdolreza Hosseindoust, Suhyup Lee, Yohan Choi, Semin Jeon, YeonHa Kim, Byung Jo Chae
Kangwon National University

PO-04-59 Effects of nutrient levels and feed Composition in Weaner Diets on Growth Performance of Growing-Finishing Pigs
JongKwan Jo, Abdolreza Hosseindoust, Suhyup Lee, Yohan Choi, Kim, Semin Jeon, Minju Kim, Ill Kyong Kwon, Byung Jo Chae
Kangwon National University

PO-04-60 Effects of dietary L-ornithine on mother milk free amino acid composition and pup sleeping behavior in mice
Mayumi Takakura¹, Satsuki Nagamachi¹, Takuma Nishigawa¹, Vishwajit S. Chowdhury², Shinobu Yasuo¹, Mitsuhiro Furuse¹
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² Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University

PO-04-61 Effects of dietary L-serine on free amino acid composition of milk and performance of offspring in mice
Satsuki Nagamachi¹, Mayumi Takakura¹, Takuma Nishigawa¹, Vishwajit S. Chowdhury², Shinobu Yasuo¹, Mitsuhiro Furuse¹
¹ Laboratory of Regulation in Metabolism and Behavior, Faculty of Agriculture, Kyushu University,
² Division for Experimental Natural Science, Faculty of Arts and Science, Kyushu University

PO-04-62 Effect of dietary melamine concentrations on performance and tissue melamine residue in broiler chickens
Ji Eun Shin, Jong Hyuk Kim, Gi Ppeum Han, Dong Yong Kil
Chung-Ang University

PO-04-63 Chronic administration of eicosapentaenoic acid increased fat utilization by up-regulating oxidative metabolism related genes of skeletal muscle in rats
Yusuke Komiya, Jun Hai, Fuminori Kawabata, Mako Nakamura, Ryuichi Tatsumi, Yoshihide Ikeuchi, Wataru Mizunoa
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PO-04-64 Evaluation of the bacterial composition in porcine colostrum and mature milk
Yuri Harada¹, Takamitsu Tsukahara¹,², Shoya Tai¹, Nobuo Nakanishi¹, Kikuto Fukuta¹, Ryō Inoue¹
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PO-04-65 EFFECTS OF DIFFERENT ENVIRONMENTAL TEMPERATURES ON BASAL METABOLISM OF GROWING PIGS
Yu Ju Chou, I Lei Hung, Shyh Hwa Liu, Liang Chou Hsia
National Pingtung University of Science and Technology

PO-04-66 THE BACTERIOSTATIC EFFECT OF COCONUT OIL IN ESCHERICHIA COLI AND SALMONELLA ENTERICA (in vitro)
Yi Sin Liu, Shu Ping Su, Jai Wei Lee, Liang Chou Hsia, Shyh Hwa Liu
National Pingtung University of Science and Technology

PO-04-67 EFFECTS OF EXTRUDED AND FERMENTED SOYBEAN MEAL ON THE GROWTH PERFORMANCE OF WEANING PIGS
Wen Yen Lin, Liang Chou Hsia, Shyh Hwa Liu
National Pingtung University of Science and Technology
PO-04-69 Reduction of Odorous Compounds using Fermented Liquid Sulfur on Swine In Vitro Fermentation
Min Gyu Kim, Yeon Jae Choi, Lovelia Mamuad, Ashraf Biswas, Maro Lee, Arang Son, Seong Soo Jang,
Jae Won Yoon, Maro Go, Sang Suk Lee
Department of Animal Science and Technology, Sunchon National University, Korea

PO-04-70 Supplementation of microencapsulated DHA/EPA (SALMATE®) improved reproductive performance in sows reflected by decreased losses in backfat thickness and body weight
Un-Chel Jung¹, Emil Joseph Vergara², Wenchie Marie Lumbera³, Robin Guevarra³, Seung-Yeol Cho³,
Seong Gu Hwang²
¹Naram Feed, ²Hankyong National University, ³Eugene Bio

PO-04-71 ACE inhibitory activity of original peptides derived from “milky miso” on hypertensive rats and people
Michio Muguruma¹, Satoshi Kawahara³, Kazuhiro Kusumegi¹, Tsuyoshi Hishinuma⁴, Masugi Maruyama⁵,
Toyoo Nakamura⁶
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³Yamae Foods Inc., ⁴Japan Livestock Industry Association, ⁵Faculty of Medicine, University of Miyazaki,
⁶Marunaka Food Inc.

PO-04-72 Effect of raw milk to whey ratio on the quality and digestibility of Ricotta cheese
Mei-Jen LIN, Chung-Shiuan Wu
National Pingtung University of Science and Technology

PO-04-73 Molecular basis of maternal blood IgY transfer into egg yolks of birds
Atsushi Murai, Takahito Hamano, Takouou Takimoto, Misako Kakiuchi, Misato Kobayashi, Fumihiko Horio
Nagoya University Graduate School of Bioagricultural Sciences

PO-04-74 Evaluation of the growth performance in various strains of Korean native chickens for 20 weeks after hatch
Eunjoo Kim, Samiru Sudharaka Wickramasuriya, Jaehong Yoo, Nuri Kim, Taeg Kyun Shin, Hyun Min Cho,
Jung Min Heo
Department of Animal Science and Biotechnology, Chungnam National University

PO-04-75 Effects of Coenzyme Q10 on the Expression of Genes Involved in Lipid Metabolism in Laying Hens
Yang Soo Moon, In Surk Jang
Gyeongnam National University of Science and Technology

PO-04-76 Stable and simple culture protocol for chicken primordial germ cells using apoptosis inhibitor
Ryo Ezaki, Fumiya Hirose, Shuichi Furusawa, Hiroyuki Horiuchi
Hiroshima University Graduate School of Biosphere Science

PO-04-77 Multi-strain probiotic SYNLAC® II and its impact on the intestinal health and immunity of broiler
Ting-Yu Lee¹, Hung-Hsi Hu², San-Land Young¹, Chu Chih-Yuan¹, Liu Je-Ruei², Lin Jin-Seng³
¹SynbioTech Inc., Kaohsiung Taiwan, ²Department of Food Science, National Penghu University, Taiwan,
³Department of Animal Science, National Taiwan University, Taiwan
PO-04-78  
**Acute heat stress changes protein expression of small yellow follicles in a boiler-type B strain Taiwan country chicken**  
San-Yuan Huang\(^1,2,3,4\), Chuen-Yu Cheng\(^1\), Wei-Lin Tu\(^1\), Chao-Jung Chen\(^5,6\), Hong-Lin Chan\(^7,8\), Chih-Feng Chen\(^1,2,3\), Hsin-Hsin Chen\(^1\), Pin-Chi Tang\(^1,2,3\), Yen-Pai Lee\(^1\), Shuen-Ei Chen\(^1,2,3\)

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6. Graduate Institute of Integrated Medicine, China Medical University,  
7. Institute of Bioinformatics and Structural Biology, National Tsing Hua University,  
8. Department of Medical Sciences, National Tsing Hua University

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**Effects of rice mixing ratio on productive performance in broiler chickens**  
Ken Tatsuda, Sho Ishikawa

Hyogo Prefectural Institute for Agriculture, Forestry and Fisheries

PO-04-80  
**Efficacy of Supplementary Penergetic(R) T poultry on Production Performance, Oocyst Quantity and Intestinal Morphology of Broilers Infected with Eimeria tenella**  
Jamlong Mitchaothai, Patipan Jaipeng, Kornkamon Paditporn, Rachakris Lertpatarakomol

Faculty of Veterinary Medicine, Mahanakorn University of Technology

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**SGLT1 and aquaporin gene expression in chick intestine**  
Noboru Saito, Shihoko Asai

Okayama University
PO-05-1 Combined actions of sodium diacetate with surfactant agents on pathogenic bacteria, isolated from pig carcasses, in meat medium  

Pussadee Tangwatcharin¹, Natjaya Ekapakul²  
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²Faculty of Science, Konkaen University, Thailand

PO-05-2 Sequencing and Characterization of Divergent Marbling Levels in the Beef Cattle (Longissimus dorsi Muscle) Transcriptome  

Binghai Cao¹, Dong Chen¹, Wufeng Li¹, mi du², Meng Wu³  
¹China Agricultural University, ²Department of Animal Sciences, Washington State University, USA, ³Snowdragon Beef Co., Ltd. China

PO-05-3 Decontamination of Staphylococcus aureus and Escherichia coli on the Chicken Drumstick Using Ozonated Water, Lactic Acid and Sodium Hypochlorite Solution  

Piyada Tavitchasri¹, Nualphan Ngamyeesoon², Komkhae Pilasombut³  
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PO-05-4 Effect of injection of pineapple juice on texture and water holding capacity of Japanese Shorthorn beef  

Takayuki Muramoto, Mao Miyazaki, Saki Tezuka  
Iwate University

PO-05-5 Effect of Hibiscus sabdariffa L. (Roselle) Extract on Survival of Pathogenic Bacteria in Ground Pork  

Komkhae Pilasombut¹, Nualphan Ngamyeesoon²  
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PO-05-6 Effects of different fermentation methods on the quality characteristics of Yezo Sika deer (Cervus nippon yesoensis) meat sauce products  

Yasuhiro Funatsu¹, Yukie Miyauchi¹, Makoto Kawakami², Hirofumi Hayasaka¹, Jeng-Huh Yang³, Makoto Ishioroshi¹  
¹Rakuno Gakuen University, ²Hokkaido Research Organization, ³Taste & Aroma Strategic Research Institute, ⁴National Chiayi University

PO-05-7 Aging effect on marination and quality characteristics of vacuum-packed duck breast meat  

Cheorun Jo¹, Muhammad Khan¹², Hyun Jung Lee¹, Haeilim Lee¹, Jineon Lee¹, Hyuncheol Kim¹, Ki Chang Nam³  
¹Department of Agricultural Biotechnology, Seoul National University, Korea, ²National Institute of Food Science and Technology, University of Agriculture, Pakistan, ³Department of Animal Science and Technology, Sunchon National University, Korea
PO-05-8 Relationship between cattle breeds and characteristics of soup stock prepared from bovine bone
Toru Kikuchi¹, Hiroshi Ishii¹, Kyu-Ho Han², Michihiro Fukushima², Toru Hayakawa³, Kenichiro Shimada²
¹Obihiro Otani Junior College, ²Obihiro University of Agriculture and Veterinary Medicine

PO-05-9 Characteristics of restructured steaks made with beef trimming derived from round and neck portions
Supaluk Sorapukdee, Panita Jungwarawit, Wanchalerm Phruksawan, Nahathai Vijitrotai, Chunya Kongrith
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PO-05-10 CHEMICAL QUALITY OF SMOKE-TREATED-CHICKEN USING CLOVES BRANCH (Eugenia aromatica) LIQUID SMOKE AND SHELF LIFE PREDICTION
Yusnaini Yusnaini, Ali Hasan Asrul Dedi, Indah Rodianawati
Universitas Khairun

PO-05-11 CANINE PET FOOD RATION BY USING MECHANICALLY SEPARATED CHICKEN MEAT BYPRODUCT
Tharanga Dilhani Silva, M. Jagath. A. P. Munasinghe, H. M. B. Gayani Herath
University of Sabaragamuwa Sri Lanka

PO-05-12 Slaughter traits of yaks raised on sub-Himalayan pastures in western Nepal
Hiroki Anzai¹, Manoj Kumar Shah², Mitsumi Nakajima³, Takashi Sakai¹, Kazato Oishi¹, Hiroyuki Hirooka³, Hajime Kumagai¹
¹Graduate School of Agriculture, Kyoto University, ²Nepal Agricultural Research Council

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Institute of Livestock and Grassland Science, NARO

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Shin-ichi Takenoyama¹, Kumiko Kawakita¹, Tomoko Matsumoto¹, Masato Kawagoe¹, Ayaka Nishi², Fumiaki Sugino¹, Tomoko Todokoro¹, Shozo Kosaka¹, Hirohsa Takasu¹, Akio Kurogi³, Michio Muguruma¹
¹Faculty of Health and Nutrition, Minami-kyusyu University, ²Miyazaki Prefecture, ³Hyuga City, ⁴JA Hyuga Agricultural Cooperative Association

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Jae Kyoung Cheong¹,², Tae Sung Kim¹, Young Kon Park¹, Jeong Mi Hwnag¹, Joong Kook Park¹, Jae Yoon Shim¹, Ho Nam Choi¹, Dong Soo Lee¹, Hyun Seok Yang²
¹Livestock Research Institute, National Agriculture Cooperative Federation, ²Hoengseong Chuckhyup

PO-05-16 Influence of a sweetener or a seaweed addition in Japanese deer meat to sensory research
Maho Yamanaka¹, Takuji Hirayama¹, Hideaki Hayashi¹, Kazuo Katoh³, Sang-Gun Roh⁴, Takuro Oikawa², Keiichi Suzuki⁵
¹School of Environmental Science, University of Shiga Prefecture, ²School of Veterinary Medicine, University of Rakuno Gakuen, ³Department of Animal Physiology, Tohoku University, ⁴Faculty of Agriculture, University of the Ryukyus, ⁵Division of Functional and Developmental Science of Livestock Production, Tohoku University
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1 School of Food, Agricultural and Environmental Sciences, Miyagi University; 2 Oshu City Cattle Museum

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1 Okayama University; 2 Hue University of Agriculture and Forestry

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Graduate School of Veterinary Science, Azabu University

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1 Iwate University; 2 Tohoku Agricultural Research Center, NARO; 3 Japan Grassland Agriculture and Forage Seed Association

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1 Fukuoka Agriculture and Forestry Research Center; 2 Kyushu Medical Co. Lt.; 3 Fukuoka Industrial Technology Center Biotechnology and Food Research Institute

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Diponegoro University, Faculty of Animal and Agricultural Sciences
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Sutida Onsongchun1, Kalaya Boonyanuwat2
1Dairy Research and Development sector, Bureau of Animal Husbandry and Genetic Improvement, Department of Livestock Development Ratchathevi, Thailand,
2Biodiversity Research sector Bureau of Animal Husbandry and Genetic Improvement, Department of Livestock Development Ratchathevi, Thailand

PO-05-29 Study of mortality rate and causes of stranding in stranded marine endangered species in eastern of gulf of Thailand In October, 2014 – June, 2015
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Marine and Coastal Resources Research and Development Center the Eastern Gulf of Thailand

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Chikako Yoshida1, Mizuki Fukushima2, Chisato Minagawa3, Wakana Takahashi1
1Field Center for Sustainable Agriculture and Forestry, Niigata University,
2Faculty of Agriculture, Niigata University, 3Graduate School of Science and Technology, Niigata University

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1Faculty of Agriculture, Kyushu University, 2Kumamoto Prefectural Agricultural Research Center,
3Faculty of Agriculture, University of Miyazaki, 4Kuju Grassland Ecomuseum

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1College of Bioresource Sciences, Nihon University, 2Bogor Agricultural University, 3Writtle College,
4Murdoch University

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1Sumiyoshi Livestock Science Station, University of Miyazaki,
2Department of Electrical and Systems Engineering, University of Miyazaki

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1Department of Animal Science and Biotechnology, Chungnam National University, Korea,
2National Institute of Animal Science, Rural Development Administration, Korea,
3Department of Animal Science, Chonbuk National University, Korea

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1Azabu University School of Veterinary Medicine,
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Kazuhuro Umemura\textsuperscript{1}, Yutaka Terada\textsuperscript{2} 
\textsuperscript{1}Hokkaido Agricultural Research Center, \textsuperscript{2}National Institute of Animal Health

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Shigeru Ninomiya\textsuperscript{1}, Go Hori\textsuperscript{2}, Yasunari Yokota\textsuperscript{2} 
\textsuperscript{1}Gifu University, Faculty of Applied Biological Science, \textsuperscript{2}Gifu University, Faculty of Engineering

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\textsuperscript{1}College of Animal Life Science, Kangwon National University, \textsuperscript{2}Gyeongsangbuk-do Livestock Research Institute

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Darsaniya Punyadarsaniya, Watchanee Mahaboonpachai, Tippawan Jantafong, Sittichon Rattanachan, Sakchai Ruenphet 
Virology and Immunology Department, Faculty of Veterinary Medicine, Mahanakorn University of Technology, Thailand

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\textsuperscript{1}Immunology and Virology Department, Faculty of Veterinary Medicine, Mahanakorn University of Technology, Thailand, \textsuperscript{2}R&D Department, Kyoritsu Seiyaku Corporation, Japan, \textsuperscript{3}Animal Health Laboratory, Department of Veterinary Medicine, Faculty of Agriculture, Tokyo University of Agriculture and Technology, Japan

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\textsuperscript{1}Chonbuk National University, \textsuperscript{2}National Institute of Animal Science, RDA

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\textsuperscript{1}Department of Animal Science and Biotechnology, Chungnam National University, Korea, \textsuperscript{2}National Institute of Animal Science, Rural Development Administration, Korea, \textsuperscript{3}Department of Animal Science, Chonbuk National University, Korea

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\textsuperscript{1}National Agriculture and Food Research Organization, \textsuperscript{2}Soma Optics, Ltd.

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\textsuperscript{1}Department of Science and Mathematics, Faculty of Agro-Industrial Technology, Kalasins University, \textsuperscript{2}Department of Animal Production Technology, Faculty of Agro-Industrial Technology, Kalasins University
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1 Bycen Inc., 2 Konan University FRONT, 3 Iwate University Department of Animal Science,
4 Iwate Agricultural Research Center Animal Industry Research Institute,
5 Rakuno Gakuen University Department of Sustainable Agriculture,
6 Department of Sustainable Agriculture Department of Veterinary Medicine

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Zulkam Pohuntu1, Syarifuddin Pontoh1
1 University of Sam Ratulangi, Faculty of Animal Husbandry, 2 University of Ichsan, Indonesia,
3 BP3K, Indonesia, 4 FEMDA, Indonesia

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Jolanda Kalangi, TFD Lumy, JC Loing, LS Kalangi, J Kalele
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1 Faculty of Animal Husbandry University of Sam Ratulangi

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Takeshi Yamazaki1, Koichi Hagiya2, Hisato Takeda3, Shigeki Yamaguchi4, Takefumi Osawa5,
Yoshitaka Nagamine6
1 Hokkaido Agricultural Research Center, NARO, 2 Obihiro University of Agriculture and Veterinary Medicine,
3 Institute of Livestock and Grassland Science, NARO, 4 Livestock Improvement Association of Japan,
5 National Livestock Breeding Center, 6 Nihon University

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AHS Salendu, IDR Lumenta, FSG Oley, RFEM Osak
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1 Faculty of Animal Husbandry University of Sam Ratulangi, 2 BP3K, Indonesia

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Tung Dinh Xuan1, Tuan Han Anh1, Duc Do Van1, Thu Nhu Van1, Meyer Anne2, Vergne Timothée2
1 National Institute of Animal Sciences, Vietnam, 2 Royal Veterinary College (RVC) in London, United Kingdom
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Ronachai Sitthigripong, Rutcharin Limsupavanich, Sawankamol Noidad, Rachakrits Lertraparakomol, Kamon Chaweewan, Chanporn Chaosap

Department of Animal Production Technology and Fisheries, Faculty of Agricultural Technology, King Mongkut's Institute of Technology Ladkrabang, Thailand;
Department of Agricultural Education, Faculty of Industrial Education, King Mongkut's Institute of Technology Ladkrabang, Thailand;
Department of Livestock Development, Thailand

Effect of farming activity included horticulture and interacting with domestic animals on person with mental disorders

Takeshi Yasue, Nozomi Sakamoto, Masakazu Komatsuzaki, Hikari Shimonish, Yuriko Yamakawa, Daisuke Kohari, Tsuyoshi Okayama, Seiichi Sasaki, Atsushi Toyoda

Ibaraki University, School of Agriculture,
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Ibaraki University Cooperation between Agriculture and Medical Science

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Naoki Tsukahara, Misaki Hayama, Ryo Ohtsuka, Mamiko Shichida, Takeyuki Ozawa

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Hsiu Chu Lee, Liang Chou Hsia

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Jung Min Heo, Samiru Sudharaka Wickramasuriya, Eunjoo Kim, Taeg Kyun Shin, Nuri Kim, Hyun Min Cho, Young Hwa Kim, Jun Cheol Park, Soo Kee Lee

Chungnam National University

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Ikuyo Nakajima, Misaki Kojima, Mika Oe, Koichi Ojima, Susumu Muroya, Koichi Chikuni

Institute of Livestock and Grassland Science, NARO

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PEERAYUT NILCHUEN, Surachai Piamkhla, Sasitorn Nakthong

Tubkwang Research Station, Department of Animal Science, Faculty of Agriculture, Kasetsart University, Thailand;
KU Kamphaeng Saen Campus Beef Producer Cooperative Ltd., Kasetsart University, Kamphaeng Saen Campus, Thailand;
Department of Animal Science, Faculty of Agriculture at Kamphaeng Saen, Kasetsart University, Kamphaeng Saen Campus, Thailand

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East Nusa Tenggara Assessment Institute for Agriculture Technology
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\textsuperscript{1}Kitasato University School of Veterinary Medicine, \textsuperscript{2}Kitasato Junior College of Health and Hygienic Science

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\textsuperscript{1}Vocational School - Bogor Agricultural University (IPB), \textsuperscript{2}Dept. of Animal Production - Bogor Agricultural University (IPB)

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Chaiwat Jarassaeng\textsuperscript{1}, Suneerat Aiumlamai\textsuperscript{1}, Chalong Wachirapakorn\textsuperscript{1}, Jos Noordhuizen\textsuperscript{3}
\textsuperscript{1}Department of Surgery and Theriogenology, Faculty of Veterinary Medicine, Khon Kaen University, Thailand, \textsuperscript{2}Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand, \textsuperscript{3}School of Agricultural and Wine Sciences, Charles Sturt University, Australia

PO-05-75  Prevented effects of synbiotics-Probio-A on atopic dermatitis murine model
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\textsuperscript{1}Department of Animal Science and Biotechnology, Tunghai University, Taiwan, \textsuperscript{2}New Bellus Enterprises CO., LTD., Taiwan

PO-05-76  Association of fat protein ratio and non-genetic factors on Milk β - Hydroxybutyric Acid and Acetone Levels in Holstein Cattle
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\textsuperscript{1}Div. of Animal and Dairy Science, Chungnam National University, \textsuperscript{2}National Institute of Animal Science, RDA, Korea

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Chang Mu-Tzu\textsuperscript{1}, Huang Chien-Hsun\textsuperscript{2}, Chen Kuo-Lung\textsuperscript{1}, Wu Chean-Ping\textsuperscript{1}
\textsuperscript{1}Department of Animal Science, National Chiayi University, Taiwan, \textsuperscript{2}Bioresource Collection and Research Center, Food Industry Research and Development Institute, Taiwan

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\textsuperscript{1}Interdisciplinary Graduate School of Agriculture and Engineering, University of Miyazaki, \textsuperscript{2}Faculty of Agriculture, University of Miyazaki, \textsuperscript{3}Faculty of Engineering, University of Miyazaki, \textsuperscript{4}Center for Animal Disease Control, University of Miyazaki
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<td>(^1) Bureau of Animal Husbandry and Genetic Improvement, DLD, (^2) Mae-Hong-Son Livestock Breeding and Testing Station</td>
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<td>(^1) Laboratory of Animal Nutrition, Bioresource Production Science, Faculty of Agriculture, Kagawa University, Japan, (^2) University Farm, Faculty of Agriculture, Kagawa University, Japan</td>
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**PO-06-1**  
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Research and development network center for animal breeding (native chicken), Department of Animal Science, Faculty of Agriculture, Khon Kaen University, Thailand

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Yen-Wen Lu\(^1\), Yu-Tsung Lin\(^1\), Ling-Ling Lo\(^1\), Pei-Hwa Wang\(^2\)  
\(^1\) Department of Bio-Industrial Mechantronics Engineering, National Taiwan University, \(^2\) Department of Animal Science, National Taiwan University

**PO-06-3**  
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Aunchalee Jualhom\(^1\), Yaowaluck Leepajit\(^2\), Sansak Nakavisut\(^3\)  
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**PO-06-4**  
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Pongchan Na-Lampang  
School of Animal Production Technology, Suranaree University of Technology

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Aruba Ikejiri\(^1\), Takuji Hirayama\(^2\), Takuro Oikawa\(^1\)  
\(^1\) Faculty of Agriculture, University of the Ryukyus, \(^2\) School of Environmental Science, University of Shiga Prefecture

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Yoshinori Terawaki, Takahiro Kawagishi  
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\(^1\) Hokkaido dairy milk recording and testing association, \(^2\) University of Georgia, \(^3\) Holstein cattle association of Japan Hokkaido Branch
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