

The 2025 Fall Meeting of Japan Poultry Science Association

September 15, 2025

Gifu University

Presentation 7min.
Discussion 3min.

Room1

Morning Session (9:00~11:35)

○ I -1~○ I -12 Best Presentation Award Candidate Oral Session

(Genetics, Breeding, Physiology, Environment , Hygiene)

9:00~9:55

- 1 Elucidating the genetic basis of extremely long crowing using whole-genome collection of Japanese native chickens
○Yuki Matsuda¹, Masaoki Tsudzuki², Tsuyoshi Shimmura¹
(¹Tokyo Univ. of Agri. and Tech., ²Hiroshima Univ.)
- 2 Differentiation in meat traits between two miniature Japanese indigenous chicken breeds
○Dipson Gyawali, Haruka Kajiyama, Yuma Nishida, Yume Okada, Prudence Nyirimana, Toshihiro Nade and Tatsuhiko Goto (Obihiro Univ)
- 3 Analysis of feather color as a quantitative trait in Japanese indigenous chicken breeds
○Emmanuel Tope Ogunwale¹, Dipson Gyawali¹ and Tatsuhiko Goto^{1,2}
(¹Obihiro Univ.; Anim. Sci, ²Obihiro Univ.; GAMRC)
- 4 Assessment of Genetic Diversity in Captive Adélie Penguins (*Pygoscelis adeliae*)
○Moena Hara^{1,2}, Yosuke Zaitu² and Ryo Tadano¹ (¹Gifu Univ., ²Port of Nagoya Public Aquarium)
- 5 Genetic basis of feather pecking.
○Yukima Watanabe¹, Yuki Higashiura¹, Ririka Yamada¹, Yuki Matsuda¹, Kazuhiro Rikimaru², Masaki Yamanishi³, Hisashi Wakahara⁴, Tsuyoshi Shimmura¹
(¹Tokyo Univ. of Agr. and Tech., ²Akita Pref. Livestock Exp. Stn., ³NLBC Okazaki Stn., ⁴Goto Hatchery, Inc.)

9:55~10:05

Break (10min.)

10:05~10:40

- 6 Search for candidate genes for open field activity QTL in chickens
○Aoi Ido, Akira Ishikawa (Nagoya Univ.)
- 7 Predicting Poultry Traits using Simulated Genetic Data and Linear Regression
○Qasim Hussain¹, Kuo Pin Chuang²
(¹Dept. Trop. Agric. Int. Coop., Natl. Pingtung Univ. Sci. Technol., Taiwan,
²Grad. Inst. Anim. Vaccine Technol., Natl. Pingtung Univ. Sci. Technol., Taiwan)
- 8 Enhancing Immune Responses Against IBDV Using N-Terminal Flagellin-tVP2 Chimeric Constructs
○Muhammad Umar¹, Haroon Afzal², and Li-Ting Cheng^{1,2}
(¹Grad. Inst. Anim. Vaccine Technol., Natl. Pingtung Univ. Sci & Technol., Taiwan
²Intl. Program in Anim. Vaccine Technol., Natl. Pingtung Univ. Sci & Technol., Taiwan)

10:40~10:50

Break (10min.)

10:50~11:35

- 9 Identification of cells responsible for polyamine synthesis in the renal tissue of broilers
○Yuma Shiomi¹, Takahiro Shibata¹, Atushi Murai¹ and Kyohei Furukawa¹ (¹Nagoya Univ.)
- 10 Synthesis and Function of Peripheral Serotonin in the Ovaries and Oviducts of Laying Hens
○Yumi Shimbo¹, Mamiko Tokita², Tsuyoshi Shimmura² and Kan Sato^{1,2} (¹Tohoku Univ., ²TUAT.)
- 11 Changes in Intestinal Mucosal Barrier Function and Polyamines concentration in Laying Hens from the Mid to Late Production Period
○Ai Kuroda¹, Jun-ichi Shiraishi², Jaisue Jirapat¹, Naoki Isobe¹, Takahiro Nii¹
(¹Hiroshima Univ., ²Nippon Vet. Life Sci. Univ.)
- 12 Effects of *Lactobacillus johnsonii* W11 strain application to fertilized eggshells on chick growth.
○Naoko Ishimoto¹, Jirapat Jaisue¹, Naoki Isobe¹ and Takahiro Nii¹
(¹Graduate School of Integrated Sciences for Life, Hiroshima Univ.)

11:35~12:00

Break

(25min.)

12:00~12:50

Luncheon Seminar

(50min.)

12:50~13:20

Break

(30min.)

13:20~14:20

General Meeting, Awards Ceremony (60min.)

14:20~14:30

Break

(10min.)

Afternoon Session (14:30~17:00)

I -13~ I -24 General Presentation Oral Session

(Genetics, Breeding, Reproduction, Physiology, Environment , Hygiene)

- 13 Identification of a feather pecking QTL region and development of DNA markers in chickens
Akira Ishikawa¹, Haruko Yamada², Yoshiko Ochiai³, Shogo Matsunaga⁴, Hiromi Yuhashi²
(¹Nagoya Univ., ²Poultry lab. Wakayama Pref., ³Yamaguchi Agri. & Fore Gene Tec Ctr., ⁴Nagasaki Agri. For. Tech. Develop. Ctr.)
- 14 Phenotypic analysis of egg yolk amino acid traits in four Japanese indigenous chicken breeds.
○Tatsuhiko Goto¹, Mana Furuta¹, Dipson Gyawali¹, Emmanuel Tope Ogunwale¹, Yoshiyuki Ohta², Jun-ichi Shiraishi² (¹Obihiro Univ., ²Nippon Vet. Life Sci. Univ.)
- 15 Attempts for the establishment of iPS cells derived from duck cells
○Masafumi Katayama¹, Tomokazu Fukuda², Manabu Onuma¹ (¹NIES., ²Iwate Univ.)
- 16 Chicken Primordial Germ Cells to Generate New Transgenic Chicken Resources
Yuya Okuzaki¹, Takeo Uemura¹ and ○Ken-ichi Nishijima (¹Nagoya Univ.)
- 17 A Study on genetic resource conservation using frozen semen of Barred Plymouth Rock and Araucana
○Shinya Tanaka¹, Yuta Mukai¹, Tatsuya Niinomi¹, Shin Taniguchi², Keiichi Inoue³ and Rikiya Yamamoto¹ (¹NLB Okazaki Stn., ²CIS, ³Miyazaki Univ.)
- 18 Detrimental effect of dichlorodiphenyltrichloroethane (DDT) on germ cells in Japanese quail
○Shusei Mizushima¹, Yuya Ogawa^{1,2} and Asato Kuroiwa¹ (¹Hokkaido Univ., ²NCCHD)
- 19 Effect of luminal glycine on active Na⁺ absorption in the chick oviduct.
○Akira Tsukada¹, Tatsuyuki Takahashi², Ryuga Kudo³ and Takaharu Kozakai³
(¹Nagoya Univ., ²Kitasato Univ., ³Yamagata Univ.)
- 20 A study on the comfort of laying hens using conventional cages.
○Sachi Ashizawa¹, Koichi Matsushita² and Terumi Takahashi³
(¹Yamanashi livestock and dairy farming technology Ctr., ²Yamanashi Pref. calf breeding assoc., ³Yamanashi Pref.)
- 21 Characteristics of oviposition time in Layer-Type Nagoya Breed
○Mika Akao¹, Hiromitsu Miyakawa¹, Sawa Sugito² and Naokazu Minoguchi¹
(¹Aichi Agri. Res. Ctr., ²Ama Agri.,Forestry and Fisheries Office)
- 22 Development of anti-Avian influenza virus fabric
○Kazuya Nishihara¹, ²Toshiyo Yabuta, ²Hiroki Takakuwa
(¹Sekisui Material Solutions Co.,Ltd.,²Ctr. For Molecular Res. In Infectious Disease, Kyoto Sangyo Univ.)

- 23 Multiple regression analysis of the effects of environmental factors in poultry houses (temperature, humidity, CO₂ concentration) on chicken mortality
 ○Kanae Kobayashi ¹, Haruka Kamada ¹, Takahiro Nakanishi ² and Kazumi Kita ¹
 (¹ Fac Agr, ² Sup Computing Info Sci Ctr., Iwate Univ)
- 24 Temporal Dynamics of Feather Pecking and the Effect of Beak Trimming on Feather Loss Suppression in Meat-Type Nagoya Breed
 ○Aimi Yoshida, Keizou Kobayashi, Hiromitsu Miyakawa, Mika Akao, Naokazu Minoguchi
 (Aichi Pref. Agricultural Res. Ctr.)

Room2

Morning Session (9:00~11:35)

○Ⅱ-1~○Ⅱ-13 Best Presentation Award Candidate Oral Session (Nutrition and Feeds, Physiology, Processing and Products)

9:00~9:45

- 1 Effect of natto feeding on heat stress and productivity in laying hens reared in a hot environment
 ○Kaori Suzuki¹, Hikaru Ikarugi¹, Sayumi Fukuda¹, Takanobu Nishikawa¹ and Ryosuke Kadoya²
 (¹ Takanofoods Co.,Ltd, ² Sugiyama Jogakuen Univ.)
- 2 Analysis of the Relationship between Egg Production and Lipid Metabolism in two Breeds of Aged Layer Chickens
 ○Saki Kubota¹, Keizo Kobayashi², Aimi Yoshida², Naokazu Minoguchi², Kyohei Furukawa¹ and Atsushi Murai¹ (¹Nagoya Univ., ²Aichi Agric. Res. Cent.)
- 3 Impact of Tamari soy sauce cake on laying hen's productivity, egg quality, plasma estradiol and litter moisture under heat
 ○Abdul H. A. Heryawan¹ • Yuma Hori² • Bagus H. Wicaksono³ • Akemi Yamamoto²
 (¹Grad School of Nat Sci and Tech, Gifu Univ • ²Fac. of Applied Biol Sci, Gifu Univ • ³United Grad School of Agri Sci, Gifu Univ)
- 4 Identification of candidate factors involved in decrease in egg-white weight in laying hens fed low phosphorus diets
 ○Natsuki Kawaguchi¹, Haruhiko Ohtsu², Fumika Hara², Tomoka Ema² and Kan Sato¹
 (¹Tohoku Univ., ²NARO.)

9:45~9:55

Break (10min.)

9:55~10:40

- 5 Effects of Astaxanthin-rich Dried Cell Powder from *Paracoccus carotinifaciens* (Panaferd®-AX) on Muscle Concentrations of Carotenoids, Fatty Acids, and Imidazole Dipeptides in Broiler Chickens
○Yoshinao Kume¹, Miori Shintaku¹, Mizuki Kamegawa², Ayumi Katafuchi², Saki Shimamoto³, Miyu Kamimura³, Daichi Kuwahara⁴, Yukiko Osawa⁴, Shinya Ishihara⁵, Akira Ohtsuka^{1,2,3}, Daichi Ijiri^{1,2,3}
(¹Fac. Agr., Kagoshima Univ., ²Utd. Grad. Sch. Agr., Kagoshima Univ., Kagoshima Univ., ³Joint. Fac. Vet. Med., Kagoshima Univ. ⁴ENEOS Techno Materials Corporation., ⁵Grad. Sch. Appl. Life Sci., Nippon Vet. Life Sci. Univ.)
- 6 Effects of restriction feeding on the growth performance, abdominal fat accumulation, meat quality, and walking ability of broiler chicks
○Risa Migita, Junya Takegaki, Takaoki Saneyasu and Kazuhisa Honda
(Grad. Sch. Agr. Sci., Kobe Univ.)
- 7 Impact of Okara Meal on Growth Performance and Jejunal Histomorphology in Broilers
○Bagus Himawan Wicaksono¹, Muhsin Al-Anas², Nur'alim Hidayaturohman², and Akemi Yamamoto³ (¹UGSAS Gifu Univ., ²Anim. Sci. Gadjah Mada Univ., ³App. Bio. Sci. Gifu Univ.)
- 8 Re-examination of the effect low-protein diets supplemented with synthetic amino acids on production performance and nitrogen excretion during the grower period of broiler chickens.
○Tomoka Ema, Fumika Nanto-Hara and Haruhiko Ohtsu
(Inst. of Livestock and Grassland Science, NARO)

10:40~10:50

Break (10min.)

10:50~11:35

- 9 Investigation of myofibrillar-derived polypeptides associated with individual differences in skeletal muscle proteolysis induced by pre-slaughter fasting and meat quality after aging.
○Minori Egawa¹, Koki Yoshino², Daichi Ijiri³, Ayumi Katafuchi³, Saki Shimamoto³, Akira Ohtsuka³, Takayuki Ibi², Sachi Katsumata²
(¹Okayama Univ., ²Graduate school of environmental, life and natural science, Okayama University, ³Utd. Grad. Sch. Agr., Kagoshima Univ.)
- 10 Effects of hypertonic saline administration on protein and lipid metabolism-related gene expression in chicks
○Kaoruko Murata, Nnamdi Godswill Dialoke, Junya Takegaki, Takaoki Saneyasu and Kazuhisa Honda (Grad. Sch. Agr. Sci., Kobe Univ.)
- 11 Expression of Oxidation- and Glycation-Stress Related Genes in Japanese Quail Chicks
○Nanako Makihara¹, Hikaru Suzuki², Kenji Ichianagi², Mostafa Helal³ and Atsushi Iwasawa¹
(¹Gifu Univ., ²Nagoya Univ., ³Cairo Univ.)
- 12 Egg Quality and Fatty Acid Composition of Double Yolk Egg in Quail
○Miko Shibano and Nokazu Minoguchi (Aichi Agricultural Res Ctr.)

11:35~12:00	Break	(25min.)
12:00~12:50	Luncheon Seminar	(50min.)
12:50~13:20	Break	(30min.)
13:20~14:20	General Meeting, Awards Ceremony	(60min.)
14:20~14:30	Break	(10min.)

Afternoon Session (14:30~17:00)

II-13~II-25 General Presentation Oral Session (Nutrition and Feeds, Physiology, Processing and Products)

- 13 A study on the regulatory mechanisms of water intake in chickens
 ○Hiyori Ozeki¹ Yuta Yoshida¹ (¹Ibaraki Univ)
- 14 A study on the regulatory mechanisms of water intake in chickens
 ○Hiyori Ozeki¹ Yuta Yoshida¹ (¹Ibaraki Univ)
- 15 Effects of green LED light irradiation on utilization of energy in broiler chicks.
 Takaki Utashiro, Etsuko Hasegawa, Jun-ichi Shiraishi and ○Yoshiyuki Ohta
 (Grad. Sch. Appl. Life Sci., Nippon Vet. Life Sci. Univ.,)
- 16 Effects of UVB light regime on diurnal behavior and plasma low molecular weight metabolites in zebra finches (*Taeniopygia guttata*)
 Mako Iida¹, Yu Ogawa¹, Yoshiyuki Ohta¹ Yasuko Tobari² and ○Jun-ichi Shiraishi¹
 (¹ Nippon Vet. Life Sci. Univ., ²Azabu Univ.)
- 17 Effects of Cyclic-high Ambient Temperature on Lipid Peroxidation and Low-molecular Weight Metabolism in Pectoralis Major Muscle and Liver of Broiler Chickens
 ○Ayumi Katafuchi¹ • Kanami Ishibashi² • Shozo Tomonaga³ • Saki Shimamoto⁴ • Miyu Kamimura⁴ • Shinya Ishihara⁵ • Akira Ohtsuka^{1,2,4} • Daichi Ijiri^{1,2,4}
 (¹Utd. Grad. Sch. Agr., Kagoshima Univ., ²Fac. Agr., Kagoshima Univ., ³Grad. Sch. Agr., Kyoto Univ., ⁴Joint. Fac. Vet. Med., Kagoshima Univ. ⁵SKLV., Kagoshima Univ. ⁶Grad. Sch. Appl. Life Sci., Nippon Vet. Life Sci. Univ.)

- 18 Dietary L-citrulline changes free amino acid composition in the breast muscle of heat-exposed market-age broilers
○Vishwajit S. Chowdhury¹, Mohamed Z. Elhussiny^{1,2}, Haruka Nishimura¹, Yoshimitsu Ouchi³, Futoshi Koyama⁴ and Takashi Bungo³
(¹Kyushu Univ., ²Aswan Univ., Egypt, ³Okayama Univ. Sci., ⁴Fukuoka Argil. Forest. Res. Center)
- 19 Effect of low-protein diets supplemented with synthetic amino acids on production performance and nitrogen excretion during the whole rearing period of broiler chickens.
○Fumika Nanto-Hara, Tomoka Ema, and Haruhiko Ohtsu
(Inst. of Livestock and Grassland Science, NARO)
- 20 The effect of dietary supplementation of *Euglena gracilis* on growth and immunity in broiler chicken
○Masahiro Yasuda¹, Amany Ramah¹, Arvendi Rachima Jadi¹, Toru Okada², Takuji Hanashiro³, Nonomi Suzuki³ and Masanobu Horiuchi³
(¹Univ. of Miyazaki, ²ASKA Animal Health Co., Ltd., ³Euglena Co., Ltd.)
- 21 Oral taurine causes to lowering body temperature and reducing pathogenic microflora in chicks
○ Mohamed Z. Elhussiny^{1,2}, Yoshimitsu Ouchi³, Takashi Bungo³, and Vishwajit S. Chowdhury¹
(¹ Kyushu Univ., Japan, ² Aswan Univ., Egypt, ³Okayama Univ. of Science, Japan)
- 22 Effects of red pigment source supplementation on egg quality and blood biochemical parameters in Silkie Fowl
○Sadao Kojima (Tokyo Met. Agri. and Fores. Res. Cent.)
- 23 Effect of reduced dietary phosphorus content on egg production and eggshell quality in 45-62 week old laying hens
Fumika Nanto-Hara, Tomoka Ema, and ○Haruhiko Ohtsu
(Inst. of Livestock and Grassland Science, NARO)
- 24 Effects of Pause Day Levels on Egg Yolk Viscosity, Yolk Fat and Egg Yolk Sphere Structure in the Layer Type Nagoya Breed Chickens
○Naokazu Minoguchi¹, Yu Nishida², Yumi Yamanaka², Noriko Ogawa², Masami Sato¹
(¹ Aichi Agricultural Research Center., ² Chubu University.)
- 25 The Possibility of Utilization Double Yolk Egg
○Akiko Sano (Cultural Historian of Japanese Quail)