

The 2022 Fall Meeting of Japan Poultry Science Association

September 17, 2022

Online

Presentation 7min.
Discussion 3min.

Morning Session (9:00~11:10)

○ I – 1~○ I – 12 Best Presentation Award

(Physiology, Reproduction, Nutrition and Feeds, Processing and Products)

- 1 Effect of L-137 supplementation on expression of intestinal immunity-related genes in broiler chicks
○ Ema Bogauchi, Keiko Miyama, Takaoki Saneyasu and Kazuhisa Honda
(Grad. Sch. Agr. Sci., Kobe univ.)
- 2 Effects of neonatal probiotic supplementation on liver AMPK mRNA expression and after development.
○ Kazuki Kimura, Yoshiyuki Ohta, Jun-ichi Shiraishi
(Grad. Sch. Appl. Life Sci., Nippon Vet. Life Sci. Univ.,)
- 3 Effect of Dietary Proline Supplementation on Plasma Amino Acid and Pyrrolidine Concentrations in Chickens.
○ Ryunosuke Mori and Kazumi Kita (Iwate Univ.)
- 4 Establishment of a nutrient-induced fatty liver model using laying quail and exploration of pathogenesis mechanism by comprehensive gene expression analysis.
○ Shinya Yoshida, Shengnan Gong, Atsushi Murai
(Graduate School of Bioagricultural Sci., Nagoya Univ.)
- 5 Physiological Functions of Two Novel Hypothalamic Neuropeptides, Neurosecretory protein GL and Neurosecretory protein GM, in Layer Chicks
○ Masaki Kato, Eiko Iwakoshi-Ukena, Megumi Furumitsu and Kazuyoshi Ukena
(Hiroshima Univ)
- 6 Central injection of NPY attenuates the increment of plasma glucose, but not rectal temperature, in heat-exposed chicks
○ Haruka Nishimura, Mohamed Z. Elhussiny, Shotaro Nishimura and Vishwajit S. Chowdhury
(Kyushu Univ.)

10:00~10:10

Break (10min.)

- 7 Involvement of AQP4 and atrogin-1 in the morphological changes of chick *M. complexus* at hatching.
○Ayaka Kambara¹,Noboru Saito² and Takeshi Ohkubo¹
(¹Grad. Sch. Agr., Ibaraki Univ., ²Grad. Sch. Environ. Life Sci., Okayama Univ.)

- 8 Multi-Omics analysis of the effect of different housing systems on egg
○Eiki Asagi¹,Tadahiro Matsubara¹,Nonoko Nozaki¹,Jun-ichi Shiraishi²,Shozo Tomonaga³,
Yuki Higashiura¹, Itufumi Sato ¹, Chihiro Kase⁴, Atushi Nagano⁵, Tatsuhiko Goto⁶, Kan Sato⁷, Tsuyoshi Shmmura¹ (¹Tokyo Univ. of Agr. & Tech., ²Nippon Vet. Life Sei. Univ., ³Kyoto Univ., ⁴Azabu Univ.,⁵Ryukoku Univ., ⁶Obihiro Univ., ⁷Tohoku Univ.)

- 9 Effect of differences in covering materials and egg white elimination on hatchability of windowed eggs
○Akina Kanda, Yuki Nakajima and Takahiro Tagami
(The Institute of Livestock and Grassland Science, NARO)

- 10 Induction of locomotive behavior in broiler chicks by using lighting system
○Shingo Kusuda¹, Chikamitsu Oshima², Takaoki Saneyasu¹, and Kazuhisa Honda¹
(¹Grad. Sch. Agr. Sci., Kobe Univ., ²Ishiifoods Co., LTD.)

- 11 The effect of UV-LED installation to enhance chicken growth and improve hygienic environment in chicken coop.
○Kai Ishida¹, Mutsumi Aihara², Takaaki Shimohata³, Shiori Kitayama¹, Reika Segawa¹, Takashi Uebanso¹,
Kazuaki Mawatari¹, Hiroshi Suzuki², Takahiro Emoto², Masatake Akutagawa², Mitsuo Yamamoto⁴,
Akiko Tomihisa⁴, Takahiro Wada⁵, Masayuki Okamoto⁵, Hiroshi Ito⁵, Takashi Yasuno², Yohsuke Kinouchi²
and Akira Takahashi¹
(¹Tokushima Univ. Grad. Sch. Dept. Prev. Env. Nut., ²Tokushima Univ. Grad. Sch. Tech. Ind & Soc. Sci.,
³Fukui Pref Univ. Fac. Mar. Bio, ⁴Tokushima Pref. Liv. Res. Div. ⁵Nihon Funen Co.)

- 12 Characteristics of anti-RV-N IgYs Prepared by DNA Immunization and Protein Immunization
○Nanase Kubo^{1,2}, Chun-ho Park³, Satoshi Inoue⁴, and Hajime Hatta^{1,2}
(¹ Egg&Chicken Research Center, NBL Co.,Ltd, ² Kyoto Women's Univ., ³ Kitasato Univ., ⁴ National Institute of Infectious Diseases)

11:15~11:55	Board of Trustees	(40min.)
11:55~12:00	Break	(5min.)
12:00~13:00	Online Seminar	(60min.)
13:00~13:20	Break	(20min.)
13:20~14:00	General meeting • Award Ceremony	(40min.)
14:10~15:10	Special Lecture	(60min.)
15:10~15:25	Break	(15min.)

Afternoon Session (15:30~17:00)

Presentation 7min.
Discussion 3min.

Room1

I - 1~ I - 9 General Presentation

(Genetics, Breeding, Environment and Hygiene, Processing and Products)

- I - 1 Morphological characteristics of caudal skeleton among three Japanese indigenous chicken breeds
○Tatsuhiko Goto¹, Ryoko Ono¹, Masashi Yanagawa² and Daisuke Kondoh²
(¹Obihiro Univ.; Anim. Sci., ²Obihiro Univ.; Vet. Sci.)
- I - 2 Role of SOX9 in male and female gonadal differentiation in Japanese quail.
○Shusei Mizushima, Asato Kuroiwa (Fac. Sci. Hokkaido Univ.)
- I - 3 **Effects of *in ovo* lighting with different colors on embryonic growth and hatching in layer chicks**
○Guofeng Han^{1,2}, Vishwajit S. Chowdhury³, Yansen Li¹, Zhongchun Bai² and Chunmei Li¹
(¹Nanjing Agr. Univ., ²Jiangsu Acad. Agri. Sci., ³Kyushu Univ.)
- I - 4 Effects of different lighting programs on the growth performance in meat-type Nagoya chickens
○Akihiro Nakamura, Tokida Shiori and Hiromitsu Miyakawa
(Aichi Agric. Res. Ctr.)
- I - 5 Activity Monitoring of Chickens by a Doppler Sensor
Naruya Inagaki¹, Akihiro Nakamura², Shiori Tokida², Hiromitsu Miyakawa² and ○Yukihiro Kamiya¹
(¹Aichi Pref. Univ., ²Aichi Agric. Res. Ctr.)
- I - 6 Effects of blue LED lighting on the behavior and egg production in caged and flat-reared hens
○Takashi Bungo¹, Yoshimitsu Ouchi¹, Atsushi Murai², Mitsuhiko Furuse³
(¹Okayama Univ. of Sci., ²Nagoya Univ., ³Kyushu Univ.)
- I - 7 Can blue LED irradiation of caged and flat-reared hens reduce internal stress? Analysis of stress index using eggs
○Atsushi Murai¹, Shinya Yoshida¹, TV Phuong², Tatsuhiko Goto³, Daichi Ijiri⁴, Yoshimitsu Outi⁵, Takashi Bungo⁵, Mitsuhiko Furuse²
(¹Nagoya Univ., ²Kyushu Univ., ³Obihiro Univ., ⁴Kagoshima Univ., ⁵Okayama Univ. of Sci.)
- I - 8 Food Culture of Japanese quail in Japan, Market Research of Quail Egg Commodity around JR Toyohashi Station
○Akiko Sano (Inst. Anim. Sic.)
- I - 9 Effect of Cooking Method on the Sensory Characteristic of *Jidori* and Broiler Thigh Meat
○Shohei Murata (Yamaguchi Agri. & For. Gen. Tech. Ctr.)

Room2

II - 1~II - 9 General Presentation

(Physiology, Nutrition and Feeds, Environment and Hygiene)

- II - 1 Zymosan induces neuropeptide Y mRNA expression in the medulla oblongata in chicks
Maki Takahashi¹, Sakirul Khan², Ryosuke Makino¹ and ○Tetsuya Tachibana¹
(¹Fac. of Agric., Ehime Univ., ²Fac. of Med., Oita Univ.)
- II - 2 Evaluation of cadaverine signaling and melanocortin system in late chick embryo development using brain slice culture technique.
○Jun-ichi Shiraishi¹, Kazuki Kimura¹, Tomoharu Nakamori², Hiroko Ohki-Hamazaki², Yoshiyuki Ohta¹
(¹ Nippon Vet. Life Sci. Univ., ² Kitasato Univ.)
- II - 3 Effects of insulin-like growth factor (IGF)-1 on expression of IGF-related genes in chicken myotubes
○Kazuhisa Honda, Haruki Osada, and Takaoki Saneyasu (Grad. Sch. Agr. Sci., Kobe Univ.)
- II - 4 The Alteration of Lipid Metabolism of Liver and Adipose Tissues in Heat-Stressed Broiler Chickens
○Yukako Tokutake, Suzuka Kohno, Motoi Kikusato and Kan Sato (Tohoku Univ.)
- II - 5 Possible involvement of circulating 3-hydroxy butyrate concentration on the body temperature of broiler chickens subjected to acute and chronic heat stress
○Motoi Kikusato · Yuta Tanitaka · Daiki Igarashi · Masaaki Toyomizu (Tohoku Univ.)
- II - 6 Role of renal tissue in endogenous polyamine synthesis in chickens
○Kyohei Furukawa^{1,2}, Wenliang He¹, Christopher A. Bailey¹, Fuller W. Bazer¹, Motoi Kikusato², Masaaki Toyomizu², and Guoyao Wu¹
(¹Texas A&M Univ., ²Tohoku Univ.)
- II - 7 Effect of High Feeding of Dietary Carotenoids on Egg Yolk and Singlet Oxygen Quenching Activity
○Sadao Kojima¹ and Ayako Osawa²
(¹Tokyo Met. Agri. and Fores. Res. Cent., ²Kanagawa Inst. of Tech.)
- II - 8 Effects of feeding dry prepared dashi shiborikasu on the productivity and meat quality in meat-type Nagoya chickens
○Keizou Kobayashi¹, Masaki Kuwabara², Akihiro Nakamura¹ and Hiromitsu Miyakawa¹
(¹Aichi Agric.Res.Ctr., ²Aichi Pref. Livestock Industry Division)
- II - 9 Effects of aging, egg-shell dirt and storage day on hatchability and bacterial contamination of the broiler breeder fertilized eggs.
Takumi Sugiura, Shuhei Ogura, Naoki Suzuki, Yusaku Tsugami, Naoki Isobe, Yukinori Yoshimura, Kouji Yamamoto, Takashi Bungo and ○Takahiro Nii
(Grad. Sch. of Integrated Sci. for Life, Hiroshima Univ.)