

The Journal of Poultry Science

VOLUME 51 NUMBER 2 APRIL 2014



JPSA 
Japan Poultry Science Association

International journal published by
Japan Poultry Science Association

Review

Role of Vitamin E in Counteracting Oxidative Stress in Poultry	Arun K. Panda and Gita Cherian	109
--	--------------------------------	-----

Original Papers

Breeding and Genetics

Quantitative Trait Loci Mapping for External Egg Traits in F ₂ Chickens	Tatsuhiko Goto, Akira Ishikawa, Minoru Yoshida, Naoki Goto, Tetsuya Umino, Masahide Nishibori and Masaaki Tsudzuki	118
Matrilineal Genetic Structure of Domestic Geese	Jing Sun, Shan Zhang, Da-Qian He, Shi-Yi Chen, Zi-Yuan Duan, Yong-Gang Yao and Yi-Ping Liu	130
Relationship between the Production Traits and three Candidate Genes in the Prolactin's In/Del×In/Del Population of Silkie Fowl	MD. Mijanur Rahman, Riho Matsuda, Tomoe Matsuda, Yuki Nishiyama, Kosuke Jozaki, Kajio Anann and Yasuhiko Wada	138

Nutrition and Feed

Effect of Organic Acid Blends in Drinking Water on Growth Performance, Blood Constituents and Immune Response of Broiler Chickens	Ernesto Marin-Flamand, Alma Vázquez-Durán and Abraham Méndez-Albores	144
Effects of β-Alanine Dietary Supplementation on Concentration of Carnosine and Quality of Broiler Muscle Tissue	Gordana Kralik, Milan Sak-Bosnar, Zlata Kralik and Olivera Galović	151
Effects of Corn Naturally Contaminated with Aflatoxins on Performance, Calcium and Phosphorus Metabolism, and Bone Mineralization of Broiler Chicks	Shiping Bai, Leilei Wang, Yuheng Luo, Xumei Ding, Jun Yang, Jie Bai, Keying Zhang and Jianping Wang	157
Effects of Dietary Bamboo Charcoal Powder Including Bamboo Vinegar Liquid Supplementation on Growth Performance, Fecal Microflora Population and Intestinal Morphology in Betong Chickens	Jessada Rattanawut	165
Influence of Fat Source and Xylanase Supplementation on Performance, Utilisation of Energy and Fat, and Caecal Microbiota Counts in Broiler Starters Fed Wheat-Based Diets	Piyamas Tanchaenrat, Velmurugu Ravindran, Abdul Lateef Molan and Ganesharane Ravindran	172

(Research Note)

Association between Digesta pH, Body Weight, and Nutrient Utilization in Chickens of Different Body Weights and at Different Ages	Nanung D. Dono, Nicholas H. Sparks and Oluyinka A. Olukosi	180
---	--	-----

(Research Note)

Feeding of Low-Fibre Sunflower (<i>Helianthus annuus</i> L.) Meal as Substitute of Soybean Meal in Turkey Rations: Effects on Growth Performance and Meat Quality	Vito Laudadio, Marcello Introna, Nunzia M.B. Lastella and Vincenzo Tufarelli	185
--	--	-----

(Research Note)

Influence of Valine Analogues on Protein Synthesis of Chicken Embryo Myoblasts	Kazumi Kita and Ryosuke Makino	191
--	--------------------------------	-----

Physiology and Reproduction

A Comparison of Monochromatic and Mixed LED Light Color on Performance, Bone Mineral Density, Meat and Blood Properties, and Immunity of Broiler Chicks	Md. Rakibul Hassan, Shabiha Sultana, Ho S. Choe and Kyeong S. Ryu	195
---	---	-----

(Research Note)

Simple Culture System for Bobwhite Quail and Japanese Quail Embryos from the Blastoderm Stage to Hatching using a Single Surrogate Eggshell	Atsushi Kato, Shusei Mizushima, Kiyoshi Shimada, Hiroshi Kagami and Tamao Ono	202
---	---	-----

Processing and Products

Chicken Breast Meat Marinated with Increasing Levels of Sodium Bicarbonate	Massimiliano Petracci, Luca Laghi, Simone Rimini, Pietro Rocculi, Francesco Capozzi and Claudio Cavani	206
Production of n-3PUFA Enriched Eggs By Feeding Various Dietary Ratios of n-6 to n-3 Fatty Acids and Vitamin A Levels to the Laying Hens in Hot Climate	Shakeel Ahmad, Ahsan-ul-Haq, Muhammad Yousaf, Zahid Kamran, Ata-ur-Rehman and Muhammad U. Sohail	213
Changes in Chemical-Physical Index and Microstructure During Dry-cured Duck Processing	Daoying Wang, Muhan Zhang, Weimin Xu, Huan Bian, Fang Liu, Zhiming Geng, Yongzhi Zhu and Xinglian Xu	220

Retraction		227
------------------	--	-----

Erratum		227
---------------	--	-----