

Contents

Review Paper

- 1** Management and control of coccidiosis in poultry — A review
 Rafiq Ahmad, Yu-Hsiang Yu, Kuo-Feng Hua, Wei-Jung Chen, Daniel Zaborski, Andrzej Dybus, Felix Shih-Hsiang Hsiao, Yeong-Hsiang Cheng (Taiwan)
-

Animal Breeding and Genetics

- 16** Heat stress effects on the genetics of growth traits in Thai native chickens (Pradu Hang dum)
 Wuttigrai Boonkum, Vibuntita Chankitisakul, Srinuan Kananit, Wootichai Kenchaiwong (Thailand)
- 28** Comparative analysis of liver transcriptome reveals adaptive responses to hypoxia environmental condition in Tibetan chicken
 Yongqing Cao, Tao Zeng, Wei Han, Xueying Ma, Tiantian Gu, Li Chen, Yong Tian, Wenwu Xu, Jianmei Yin, Guohui Li, Lizhi Lu, Shuangbao Guan (China)
-

Animal Reproduction and Physiology

- 39** Factors associated with farrowing assistance in hyperprolific sows
 Napatsawan Wongwaipisitkul, Yanwarut Champanitkit, Natthacha Vaewburt, Piyakorn Phattarathianchai, Padet Tummaruk (Thailand)
- 50** Testicular fat deposition attenuates reproductive performance via decreased follicle-stimulating hormone level and sperm meiosis and testosterone synthesis in mouse
 Miao Du, Shikun Chen, Yang Chen, Xinxu Yuan, Huansheng Dong (China)
- 61** Thermal impacts on transcriptome of *Pectoralis major* muscle collected from commercial broilers, Thai native chickens and its crossbreeds
 Yuwares Malila, Tanaporn Uengwetwanit, Pornnicha Sanpinit, Wipakarn Songyou, Yanee Srimarut, Sajee Kunhareang (Thailand)
-

Ruminant Nutrition and Forage Utilization

- 74** Microencapsulation of *Mitragyna* leaf extracts to be used as a bioactive compound source to enhance *in vitro* fermentation characteristics and microbial dynamics
 Maharach Matra, Srisan Phupaboon, Pajaree Totakul, Ronnachai Prommachart, Assar Ali Shah, Ali Mujtaba Shah, Metha Wanapat (Thailand)
- 84** Fermentation characteristics and microbial community composition of wet brewer's grains and corn stover mixed silage prepared with cellulase and lactic acid bacteria supplementation
 Guoqiang Zhao, Hao Wu, Yangyuan Li, Li Li, Jiajun He, Xinjian Yang, Xiangxue Xie (China)

**Nonruminant
Nutrition and
Feed Processing**

- 95** Effects of enzymolysis and fermentation of Chinese herbal medicines on serum component, egg production, and hormone receptor expression in laying hens
Mei Hong Jiang, Tao Zhang, Qing Ming Wang, Jin Shan Ge, Lu Lu Sun, Meng Qi Li, Qi Yuan Miao, Yuan Zhao Zhu (China)
- 105** Chemical composition of barley and co-products from barley, corn, and wheat produced in South-East Asia or Australia
Natalia S. Fanelli, Leidy J. Torres-Mendoza, Jerubella J. Abelilla, Hans H. Stein (USA)
-

Animal Products

- 116** Evaluation of citrus fiber as a natural alternative to sodium tripolyphosphate in marinated boneless broiler chicken breast and inside beef skirt (transversus abdominis)
Kendal R. Howard, Cheyenne L. Runyan, Allen B. Poe, Andrew M. Cassens, Lea A. Kinman (USA)
- 123** Effect of coating with combined chitosan and gallic acid on shelf-life stability of Jeju black cattle beef
Van-Ba Hoa, Dong-Heon Song, Kuk-Hwan Seol, Yun-Seok Kim, Hyun-Wook Kim, In-Seon Bae, Soo-Hyun Cho (Korea)
-

Animal Health

- 131** Protective effect of *Macleaya cordata* isoquinoline alkaloids on lipopolysaccharide-induced liver injury in broilers
Jiaxin Chen, Weiren Yang, Hua Liu, Jiaxing Niu, Yang Liu, Qun Cheng (China)
-

**Animal Behavior
and Welfare**

- 142** Effects of heat stress on performance, physiological parameters, and blood profiles of early-fattening Hanwoo steers in climate chambers
Jun Sik Woo, Na Kyun Lee, Hong Gu Lee, Keun Kyu Park (Korea)
-

**Environment and
Management**

- 151** Effect of rearing system (free-range vs cage) on gut and muscle histomorphology and microbial loads of Italian White breed rabbits
Caterina Losacco, Antonella Tinelli, Angela Dambrosio, Nicoletta C. Quaglia, Letizia Passantino, Michele Schiavitto, Giuseppe Passantino, Vito Laudadio, Nicola Zizzo, Vincenzo Tufarelli (Italy)