Contents



Animal Breeding and Genetics

- 607 Genome-wide association study for intramuscular fat content in Chinese Lulai black pigs
 - Yanping Wang, Chao Ning, Cheng Wang, Jianfeng Guo, Jiying Wang, Ying Wu (China)
- 614 Chicken novel leukocyte immunoglobulin-like receptor subfamilies B1 and B3 are transcriptional regulators of major histocompatibility complex class I genes and signaling pathways

Anh Duc Truong, Yeojin Hong, Janggeun Lee, Kyungbaek Lee, Ha Thi Thanh Tran, Hoang Vu Dang, Viet Khong Nguyen, Hyun S. Lillehoj, Yeong Ho Hong (Korea)

Animal Reproduction and Physiology

Gallic acid caused cultured mice TM4 Sertoli cells apoptosis and necrosis Wanhong Li, Xiangpeng Yue, Fadi Li (China)

Ruminant Nutrition and Forage Utilization

- Temporal and spatial variability in the nutritive value of pasture vegetation and supplement feedstuffs for domestic ruminants in Western Kenya Alice Anyango Onyango, Uta Dickhoefer, Mariana Cristina Rufino, Klaus Butterbach-Bahl, John Patrick Goopy (Germany)
- Effect of reduced energy density of close-up diets on metabolites, lipolysis and gluconeogenesis in Holstein cows

 Wenming Huang, Libin Wang, Shengli Li, Zhijun Cao (China)
- 657 Effects of ambient temperature and rumen–protected fat supplementation on growth performance, rumen fermentation and blood parameters during cold season in Korean cattle steers

 Hyeok Joong Kang, Min Yu Piao, Seung Ju Park, Sang Weon Na, Hyun Jin Kim
 - Hyeok Joong Kang, Min Yu Piao, Seung Ju Park, Sang Weon Na, Hyun Jin Kim, Myunggi Baik (Korea)
- 665 Fermentation characteristics, chemical composition and microbial community of tropical forage silage under different temperatures Dongxia Li, Kuikui Ni, Yingchao Zhang, Yanli Lin, Fuyu Yang (China)
- 675 Effects of diet and roughage quality, and period of the day on diurnal feeding behaviour patterns of sheep and goats under subtropical conditions Mehluli Moyo, Rasheed Adekunle Adebayo, Ignatius Verla Nsahlai (South Africa)

Nonruminant Nutrition and Feed Processing

691 Graded levels of phytase on performance, bone mineralization and carcass traits of broiler fed reduced dicalcium phosphate

Henrique Barbosa de Freitas, Karina Márcia Ribeiro de Souza Nascimento, Charles Kiefer, Gilson Alexandre Gomes, Tiago Tedeschi dos Santos, Elis Regina Moraes Garcia, Thiago Rodrigues da Silva, Luanna Lopes Paiva, Patrícia Rodrigues Berno (Brazil)

Vol 32 No 5 · May 2019

Animal Products

701 Effect of different short-term high ambient temperature on chicken meat quality and ultra–structure

Minghao Zhang, Lixian Zhu, Yimin Zhang, Yanwei Mao, Mingyue Zhang, Pengcheng Dong, Lebao Niu, Xin Luo, Rongrong Liang (China)

711 Effects of dietary humic acid and enzymes on meat quality and fatty acid profiles of broiler chickens fed canola-based diets

Amogelang R. P. Disetlhe, Upenyu Marume, Victor Mlambo, Arno Hugo (South Africa)

721 Comparative study of thermal gelation properties and molecular forces of actomyosin extracted from normal and pale, soft and exudative-like chicken breast meat

Ke Li, Jun-Ya Liu, Lei Fu, Ying-Ying Zhao, Yan-Hong Bai (China)

Animal Behavior and Welfare

734 Relationship between saliva and blood cortisol in handled cows Melody Dzviti, Lizwell Mapfumo, Voster Muchenje (South Africa)

Environment and Management

742 Indoor distribution characteristics of airborne bacteria in pig buildings as influenced by season and housing type
Ki Youn Kim, Han Jong Ko (Korea)

748 Effects of a tunnel ventilation system within the tie-stall barn environment upon the productivity of dairy cattle during the winter season Borjigin Sarentonglaga, Tatsuhiro Sugiyama, Rika Fukumori, Yoshikazu Nagao (Japan)