

## Animal Breeding and Genetics

- 511** Optimal population size to detect quantitative trait loci in Korean native chicken: a simulation study  
Chiemela Peter Nwogwugwu, Yeongkuk Kim, Sunghyun Cho, Hee-Jong Roh, Jihye Cha, Seung Hwan Lee, Jun Heon Lee (Korea)
- 517** Genetic variants of the growth differentiation factor 8 affect body conformation traits in Chinese Dabieshan cattle  
Shuanping Zhao, Hai Jin, Lei Xu, Yutang Jia (China)
- 527** Evaluation of recent changes in genetic variability in Thoroughbred horses based on microsatellite markers parentage panel in Korea  
Chul Song Park, Sun Young Lee, Gil Jae Cho (Korea)

## Animal Reproduction and Physiology

- 533** Inhibitors of apoptosis: expression and regulation in the endometrium during the estrous cycle and at the maternal-conceptus interface during pregnancy in pigs  
Inkyu Yoo, Wonchul Jung, Soohyung Lee, Yugyeong Cheon, Hakhyun Ka (Korea)
- 544** Alterations of mRNA and lncRNA profiles associated with the extracellular matrix and spermatogenesis in goats  
Haolin Chen, Xiaomeng Miao, Jinge Xu, Ling Pu, Liang Li, Yong Han, Fengxian Mao, Youji Ma (China)

## Ruminant Nutrition and Forage Utilization

- 556** Effect of lactic acid bacteria and yeast supplementation on anti-nutritional factors and chemical composition of fermented total mixed ration containing cottonseed meal or rapeseed meal  
Hassan Ali Yusuf, Minyu Piao, Tao Ma, Ruiying Huo, Yan Tu (China)

## Nonruminant Nutrition and Feed Processing

- 567** Algae-based antioxidant containing selenium yeast (Economase®) enhanced the growth performance, oxidative stability, and meat quality of broiler chickens  
Maleeka N. Nambapana, Samiru S. Wickramasuriya, Shemil Priyan Macelline, K. Samarasinghe, Janak K. Vidanarachchi (Sri Lanka)
- 577** Quercetin extracted from *Sophora japonica* flower improves growth performance, nutrient digestibility, cecal microbiota, organ indexes, and breast quality in broiler chicks  
De Xin Dang, Sungbo Cho, Huan Wang, Woo Jeong Seok, Jung Heun Ha, In Ho Kim (Korea)
- 587** Dietary encapsulated *Bifidobacterium animalis* and Agave fructans improve growth performance, health parameters, and immune response in broiler chickens  
María José Hernández-Granados, Rosa Isela Ortiz-Basurto, Maribel Jiménez-Fernández, Carlos Alberto García-Munguía, Elena Franco-Robles (Mexico)

- 596** Effects of fermented feed on growth performance, nutrient metabolism and cecal microflora of broilers  
Jiantao Li, Lijuan Tao, Rong Zhang, Guiqin Yang (China)
- 605** Effects of *Yarrowia lipolytica* supplementation on growth performance, intestinal health and apparent ileal digestibility of diets fed to nursery pigs  
Yi-Chi Cheng, Marcos Elias Duarte, Sung Woo Kim (USA)
- 

### Animal Products

- 614** Effects of sheep slaughter age on myogenic characteristics in skeletal muscle satellite cells  
Yunfei Han, Wenrui Guo, Rina Su, Yanni Zhang, Le Yang, Gerelt Borjigin, Yan Duan (China)
- 624** Expression levels of filaggrin-2 in relation to drip loss in pigs  
Autchara Kayan, Nunyarat Koomkrong (Thailand)
- 

### Environment and Management

- 631** Disinfection of various materials with 3-(trimethoxysilyl)-propyldimethyloctadecyl ammonium chloride in hatchery facilities  
Yu-Jin Kim, Jun-Beom Kim, Chang-Seon Song, Sang-Soep Nahm (Korea)