

Contents

Symposium	1	Leadership of AAAP scientists and journals in animal science: achievements, limitations, and challenges Jong K. Ha (Korea)
<hr/>		
Animal Breeding and Genetics	10	Position of Hungarian Merino among other Merinos, within-breed genetic similarity network and markers associated with daily weight gain Attila Zsolnai, István Egerszegi, László Rózsa, Dávid Mezőszentgyörgyi, István Anton (Hungary)
	19	Genome and chromosome wide association studies for growth traits in Simmental and Simbrah cattle René Calderón-Chagoya, Vicente Eliezer Vega-Murillo, Adriana García-Ruiz, Ángel Ríos-Utrera, Guillermo Martínez-Velázquez, Moisés Montaña-Bermúdez (México)
	29	Whole-genome sequence association study identifies cyclin dependent kinase 8 as a key gene for the number of mummified piglets Pingxian Wu, Dejuan Chen, Kai Wang, Shujie Wang, Yihui Liu, Anan Jiang, Weihang Xiao, Yanzhi Jiang, Li Zhu, Xu Xu, Xiaotian Qiu, Xuewei Li, Guoqing Tang (China)
<hr/>		
Animal Reproduction and Physiology	43	Effect of severe acute respiratory syndrome coronavirus 2 infection during pregnancy in K18-hACE2 transgenic mice Byeongseok Kim, Ki Hoon Park, Ok-Hee Lee, Giwan Lee, Hyukjung Kim, Siyoung Lee, Semi Hwang, Young Bong Kim, Youngsok Choi (Korea)
<hr/>		
Ruminant Nutrition and Forage Utilization	53	Comparison of metabolites in rumen fluid, urine, and feces of dairy cow from subacute ruminal acidosis model measured by proton nuclear magnetic resonance spectroscopy Hyun Sang Kim, Shin Ja Lee, Jun Sik Eom, Youyoung Choi, Seong Uk Jo, Jaemin Kim, Sang Suk Lee, Eun Tae Kim, Sung Sill Lee (Korea)
	63	Comparison of rectum fecal bacterial community of finishing bulls fed high-concentrate diets with active dry yeast and yeast culture supplementation Kai Gao, Chunyin Geng (China)
<hr/>		
Nonruminant Nutrition and Feed Processing	75	Dynamic of heat production partitioning in rooster by indirect calorimetry Rony Lizana Riveros, Rosiane de Sousa Camargos, Marcos Macari, Matheus de Paula Reis, Bruno Balbino Leme, Nilva Kazue Sakomura (Brazil)
	84	Effect of <i>Cichorium intybus</i> on production performance, carcass quality and blood lipid profile of hybrid duck Nafiatul Umami, Eka Rizky Vury Rahayu, Bambang Suhartanto, Ali Agus, Edi Suryanto, Mohammad Mijanur Rahman (Indonesia)

-
- 98** An assessment of responses to egg production and liver health of Japanese quails subjected to different levels of metabolizable energy
Diana Maryuri Correa Castiblanco, Michele Bernardino de Lima, Silvana Martinez Baraldi Artoni, Erikson Kadoshe de Moraes Raimundo, Daniel Silva Santos, Lizia Cordeiro de Carvalho, Edney Pereira da Silva (Brazil)
- 108** Net energy and its establishment of prediction equations for wheat bran in growing pigs
Zhiqian Lyu, Yifan Chen, Fenglai Wang, Ling Liu, Shuai Zhang, Changhua Lai (China)
- 119** Blend of essential oils can reduce diarrheal disorders and improve liver antioxidant status in weaning piglets
Maiara Ananda Grando, Vanessa Costa, Jansller Luiz Genova, Paulo Evaristo Rupolo, Liliana Bury de Azevedo, Leandro Batista Costa, Silvana Teixeira Carvalho, Thiago Pereira Ribeiro, Daniel Pigatto Monteiro, Paulo Levi de Oliveira Carvalho (Brazil)
-

Animal Products

- 132** Fatty acids composition and lipolysis of Parmigiano Reggiano PDO cheese: effect of the milk cooling temperature at the farm
Piero Franceschi, Paolo Formaggioni, Milena Brasca, Giuseppe Natrella, Michele Faccia, Massimo Malacarne, Andrea Summer (Italy)
-

Animal Biotechnology

- 144** Screening of key miRNAs related with the differentiation of subcutaneous adipocytes and the validation of miR-133a-3p functional significance in goats
Xin Li, Hao Zhang, Yong Wang, Yanyan Li, Youli Wang, Jiangjiang Zhu, Yaqiu Lin (China)
-

Animal Health

- 156** Effects of lactic acid bacteria fermented feed and three types of lactic acid bacteria (*L. plantarum*, *L. acidophilus*, *B. animalis*) on intestinal microbiota and T cell polarization (Th1, Th2, Th17, Treg) in the intestinal lymph nodes and spleens of rats
Da Yoon Yu, Sang-Hyon Oh, In Sung Kim, Gwang Il Kim, Jeong A Kim, Yang Soo Moon, Jae Cheol Jang, Sang Suk Lee, Jong Hyun Jung, Hwa Chun Park, Kwang Keun Cho (Korea)