

ANIMAL PRODUCTION SCIENCE

CONTENTS Volume 57, Issue 2, 2017, 201–400

Perspectives on Animal Biosciences

Animal welfare and efficient farming: is conflict inevitable?

Marian Stamp Dawkins 201–208

Genetics and Genomics

Genetic relationships between internal parasite resistance and production traits in Merino sheep

D. J. Brown and N. M. Fogarty 209–215

Estimates of genetic parameters and genetic trends for production and reproduction traits in Iranian buffaloes (*Bubalus bubalis*)

Navid Ghavi Hosseini-Zadeh 216–222

Changes in growth performance and body and carcass composition of common pheasants following three generations of selection for higher 7-week bodyweight

D. Zapletal, K. Karásková and E. Straková 223–228

Predictive ability of Random Forests, Boosting, Support Vector Machines and Genomic Best Linear Unbiased Prediction in different scenarios of genomic evaluation

Farhad Ghafouri-Kesbi, Ghodratollah Rahimi-Mianji, Mahmood Honarvar and Ardesir Nejati-Javaremi 229–236

Physiology, Endocrinology and Reproduction

Intergenerational effects of omega-6 fatty acids. 2. Preliminary evidence for the influence of diet fed to dams at conception on the sex ratio of lambs born to their daughters

E. H. Clayton, J. F. Wilkins and M. A. Friend 237–243

An assessment of immune and stress responsiveness in Holstein-Friesian cows selected for high and low feed conversion efficiency

J. W. Aleri, B. C. Hine, M. F. Pyman, P. D. Mansell, W. J. Wales, B. Mallard and A. D. Fisher 244–251

Nutrition and Metabolism

Interactive effects of dietary protein source and exogenous protease on growth performance, immune competence and jejunal health of broiler chickens

A. J. Cowieson, H. Lu, K. M. Ajuwon, I. Knap and O. Adeola 252–261

Individual difference in faecal and urine equol excretion and their correlation with intestinal microbiota in large white sows

Weijiang Zheng, Xun Zhang and Wen Yao 262–270

Effects of dietary acidifier supplementation on broiler growth performance, digestive and immune function indices

Irida Palamidi, Vasileios Paraskevas, Georgios Theodorou, Renata Breitsma, Gerd Schatzmayr, Georgios Theodoropoulos, Konstantinos Fegeros and Konstantinos C. Mountzouris 271–281

The effects of feeding 3-nitrooxypropanol at two doses on milk production, rumen fermentation, plasma metabolites, nutrient digestibility, and methane emissions in lactating Holstein cows
Jennifer Haisan, Yun Sun, Leluo Guan, Karen A. Beauchemin, Allan Iwaasa, Stephane Duval, Maik Kindermann, Daniel R. Barreda and Masahito Oba 282–289

Continued on next page

Mineral metabolism of pregnant goats under feed restriction

Carla J. Härter, Lisiane D. Lima, Douglas S. Castagnino, Astrid R. Rivera, Alana M. Nunes, Samuel F. Sousa, Annette Liesegang, Kleber T. Resende and Izabelle A. M. A. Teixeira 290–300

Effects of chitosan on ruminal fermentation, nutrient digestibility, and milk yield and composition of dairy cows

Pablo Gomes de Paiva, Elmeson Ferreira de Jesus, Tiago Antonio Del Valle, Gustavo Ferreira de Almeida, Artur Gabriel Brao Vilas Boas Costa, Carlos Eduardo Cardoso Consentini, Filipe Zanferari, Caio Seiti Takiya, Ives Cláudio da Silva Bueno and Francisco Palma Rennó 301–307

Effect of iron source on iron absorption by *in situ* ligated intestinal loops of broilers

Xiaofei Li, Lingyan Zhang, Liyang Zhang, Lin Lu and Xugang Luo 308–314

Feed Quality and Nutritional Value

Inclusion of cottonseed meal into loose mineral mix supplements increases the voluntary intake of the supplement by grazing heifers

R. M. Dixon, A. Anderson and J. C. Petherick 315–319

Effects of replacement of corn with potato (*Solanum tuberosum* L.) tuber meal in broiler chicken diets

Samira Adami, Ghorbanali Sadeghi, Ahmad Karimi, Osman Azizi and Mahmood Habibian 320–326

Using krabok (*Irvingia malayana*) seed oil and *Flemingia macrophylla* leaf meal as a rumen enhancer in an *in vitro* gas production system

Sungchhang Kang, Metha Wanapat, Kampanat Phesatcha, Thitima Norrapoke, Suban Foiklang, Thiwakorn Ampapon and Burarat Phesatcha 327–333

Behaviour, Well-being and Health

Clinical picture of active bovine viral diarrhoea infection in commercial bovine productive systems

Susana Astiz, Laura Cogollos, Juan Manuel Loste, Gorka Aduriz, Javier Heras and Manuel Cerviño 334–337

Environment, Technology and Production Systems

Reasons for keeping dairy goats in Tanzania, and possible goals for a sustainable breeding program

Z. C. Nziku, G. C. Kifaro, L. O. Eik, T. Steine and T. Ådnøy 338–346

Meat Science and Product Quality

An integrated sensory, consumer and olfactometry study evaluating the effects of rearing system and diet on flavour characteristics of Australian lamb

Damian Frank, Margaret Raeside, Ralph Behrendt, Raju Krishnamurthy, Udayasika Piyasiri, Gavin Rose, Peter Watkins and Robyn Warner 347–362

Meat quality traits of Nellore bulls according to different degrees of backfat thickness:

a multivariate approach

W. A. Baldassini, L. A. L. Chardulo, J. A. V. Silva, J. M. Malheiros, V. A. D. Dias, R. Espigolan, F. S. Baldi, L. G. Albuquerque, T. T. Fernandes and P. M. Padilha 363–370

Fatty acid profiles of intramuscular, intermuscular, external and internal fat in Polish Holstein-Friesian × Hereford bulls and steers fed grass silage-based diets supplemented with concentrates

Zofia Wielgosz-Groth, Monika Sobczuk-Szul, Zenon Nogalski, Magdalena Mochol, Cezary Purwin and Rafał Winarski 371–377

Evaluation of equations to estimate body composition in beef cattle using live, linear and standing-rib cut measurements

M. A. Fonseca, L. O. Tedeschi, S. C. Valadares Filho, N. F. De Paula, L. D. Silva and D. F. T. Sathler 378–390

Microbiological quality and sensory evaluation of new cured products obtained from sheep and goat meat

Georgina S. Tolentino, Letícia M. Estevinho, Ananias Pascoal, Sandra S. Rodrigues and Alfredo J. Teixeira 391–400