

Genetics, Animal Genetic Resources and Breeding*Review papers*

- Challenges and opportunities of using meat inspection data to improve pig health traits by breeding: A review
A. Horst, M. Gertz and J. Krieter 155

Original research articles

- Superoxide dismutase mimics improves semen quality during chilled preservation of rabbit spermatozoa
O.G. Sakr, A. Gad, M. Rodríguez, P.G. Rebollar and P. Millán 70
- Improvement on the efficiency of doses per conception by using a semen extender in timed artificial insemination
C.O. Rosa, D.V. Bonato, A.K. Souza, F. Morotti, R.C. Francisco, A.C. Basso, M.I.M. Martins and M.M. Seneda 77

Short communication

- Supplementation with resveratrol during culture improves the quality of *in vitro* produced bovine embryos
S. Madrid Gaviria, A. López Herrera, G. Restrepo Betancur, R. Urrego and J.J. Echeverri Zuluaga 139

Ruminant Nutrition*Original research articles*

- Monitoring predictive and informative indicators of the energy status of dairy cows during early lactation in the context of monthly milk recordings using mid-infrared spectroscopy
U. Müller, J. Kesser, C. Koch, H.-P. Helfrich and C. Rietz 6
- Dietary protein level and corn processing method: Intake, digestibility, and feeding behavior of lactating dairy cows
H. Rafiee-Yarandi, M. Alikhani, G.R. Ghorbani, M. Heydari and P. Rezamand 19
- Effect of oak acorn with or without polyethylene glycol in diets containing extruded soybean on milk fatty acid profile, ruminal fermentation and plasma metabolites of lactating goats
Z. Alipanahi, F. Fatahnia, H. Jafari, G. Taasoli, H. Mirzaei-Alamouti, D. Barrett and A. Pormalekshahi 57
- Dietary protein level and corn processing method: Lactation performance, milk fatty acid composition, rumen and blood parameters of lactation dairy cows
H. Rafiee-Yarandi, M. Alikhani, G.R. Ghorbani, M. Heydari and P. Rezamand 95
- Sex-dependent effects of maternal undernutrition on growth performance, carcass characteristics and meat quality of lambs
J. Ithurralde, R. Pérez-Clariget, F. Corrales, D. Fila, Á. López-Pérez, M.d.J. Marichal, A. Saadoun and A. Bielli 105

- Milk fatty acid profile and nitrogen utilization of dairy cows fed ryegrass-red clover silage containing plantain (*Plantago lanceolata* L.)
S. Ineichen, S. Marquardt, H.-R. Wettstein, M. Kreuzer and B. Reidy 123

- Cactus [*Opuntia stricta* (Haw.) Haw] cladodes and corn silage: How do we maximize the performance of lactating dairy cows reared in semiarid regions?
G.S. de Oliveira Moraes, A. Guim, J.N. Tabosa, J.C.C. Chagas, M. de Paula Almeida and M. de Andrade Ferreira 133

Short communication

- Influence of a feed additive containing vitamin B₁₂ and yeast extract on milk production and body temperature of grazing dairy cows under high temperature-humidity index environment
J.R. Gandra, C.S. Takiya, T.A.D. Valle, N.D. Orbach, I.R. Ferraz, E.R. Oliveira, R.H.T.B. Goes, E.R.S. Gandra, T.L. Pereira, J.D.O. Batista, H.M.C. Araki, J. Damiani and A.Z. Escobar 28

Non-Ruminant Nutrition*Original research articles*

- Effects of a mixed extract of *Cortex Fraxini*, *Pulsatilla chinensis*, and *Eucommia ulmoides* on immunity and antioxidant activity in hemp ducks
L. Bai, X. Song, Y.P. Fu, S.F. Chen, Y. Tian, R.Y. Jia, Y.F. Zou, L.X. Li, X.X. Liang, C.L. He, L.Z. Yin, G. Ye, C. Lv, G.Z. Yue and Z.Q. Yin 63
- Effects of dietary dried olive pulp inclusion on growth performance and meat quality of broiler chickens
G. Papadomichelakis, A.C. Pappas, E. Tsiplakou, G.K. Symeon, K. Sotirakoglou, V. Mpekalis, K. Fegeros and G. Zervas 115
- Effect of cellobiose supplementation on growth performance and health in rabbits
C. Ocasio-Vega, R. Delgado, R. Abad-Guamán, R. Carabaño, M.D. Carro and J. García 163
- Short communication*
- The effects of dietary 1-alpha-hydroxycholecalciferol individually or in combination with different levels of cholecalciferol on growth performance and tibia criteria in broiler chickens
M. Kheiri and N. Landy 172

Behaviour, Health and Welfare*Original research articles*

- On-farm pig dispatch methods and stockpeople attitudes on their use
F.A. Dalla Costa, T.J. Gibson, S.E.O. Oliveira, N.G. Gregory, A. Coldebella, L. Faucitano and O.A. Dalla Costa 1

Hepato-protective effect of curcumin and silymarin against <i>Eimeria stiedae</i> in experimentally infected rabbits S.M. Aboelhadid, S. El-Ashram, K.M. Hassan, W.M. Arafa and A.B. Darwish	
Evaluation of in-field efficacy of dietary ferric tyrosine on performance, intestinal health and meat quality of broiler chickens exposed to natural <i>Campylobacter jejuni</i> challenge I. Skoufos, A. Tzora, I. Giannenas, E. Bonos, A. Tsinas, E. McCartney, H. Lester, E. Christaki, P. Florou-Paneri, J. Mahdavi and P. Soultanas	33
Effects of straw provision, as environmental enrichment, on behavioural indicators of welfare and emotions in pigs reared in an experimental system M. Marcet-Rius, G. Kalonji, A. Cozzi, C. Bienboire-Frosini, P. Monneret, I. Kowalczyk, E. Teruel, E. Codecasa and P. Pageat	44
Short communication	
Impact of different group sizes on plumage cleanliness and leg disorders in broilers A. Kiani and U.K. von Borstel	89
Efficacy of <i>Clostridium butyricum</i> as probiotic feed additive against experimental <i>Salmonella</i> Typhimurium infection in pigs L. Peeters, L. Mostin, P. Wattiau, F. Boyen, J. Dewulf and D. Maes	52
Livestock Farming Systems and Management	
Original research articles	
Peri-estrus activity and rumination time and its application to estrus prediction: Evidence from dairy herds under organic grazing and low-input conventional production K. Minegishi, B.J. Heins and G.M. Pereira	144
Short communication	
Time of occurrence and prevalence of severe lameness in fattening Charolais bulls: Impact of type of floor and space allowance within type of floor L. Magrin, F. Gottardo, B. Contiero, M. Brscic and G. Cozzi	86
Reproduction Physiology	
Short communication	
Influence of forskolin supplementation on embryos produced <i>in vitro</i> C.B. Costa, P.A. Lunardelli, C. Bizarro-Silva, P.K. Fontes, M.F.G. Nogueira and M.M. Seneda	15
Physiological reproductive-status and progesterone concentration affect the results of tests to measure temperament traits in female beef cattle A. Freitas-de-Melo, A. Orihuela, G. Magri, B.D. Cruz, I. Rubio, M. Corro, M.A. Alonso and R. Ungerfeld	39
Censored Bayesian models for genetic evaluation of age at first calving in Brazilian Brahman cattle S.F. Lázaro, L. Varona, F. Fonseca e Silva, H.T. Ventura, R. Veroneze, L.C. Brito, E.V. Costa and P.S. Lopes	177
Comparative study of gene structure in the upstream regulatory region of <i>CDC10</i> and <i>MYBPC1</i> genes in Iranian fat-tailed and nonfat-tailed sheep breeds N. Bandi, M. Gholizadeh, G. Rahimi-Mianji and A. Farhadi	181
Corrigendum to 'Feeding behaviors, metabolism, and performance of primiparous and multiparous dairy cows fed high-concentrate diets' [Livest. Sci. 198 (2017) 115–119] S.M. Nasrollahi, G.R. Ghorbani, A. Zali and A. Kahyani	185