

**Genetics, Animal Genetic Resources and Breeding***Original research articles*

- Preventing twin pregnancies in dairy cattle, turning the odds into reality  
F. López-Gatius and R.H.F. Hunter 1
- Effects of Actigen, a second-generation mannan rich fraction, in antibiotics-free diets on growth performance, intestinal barrier functions and inflammation in weaned piglets  
M. Song, Y. Fan, H. Su, J. Ye, F. Liu, X. Zhu, L. Wang, P. Gao, G. Shu, Z. Wang, F. Zhu, G. Lin, Y. Xue, Q. Jiang and S. Wang 4
- Effect of dietary resveratrol supplementation on growth performance, immune response, serum biochemical indices, cecal microflora, and intestinal morphology of broiler chickens challenged with *Escherichia coli*  
H. Mohebodini, V. Jazi, R. Bakhshalinejad, A. Shabani and A. Ashayerizadeh 13
- First report of postmortem pH evolution and rigor mortis in guinea pigs  
D. Sánchez-Macías, L. Cevallos-Velastegui, D. Nuñez-Valle and A. Morales-delaNuez 22
- Carcass and meat quality traits of Nelore young bulls and steers throughout fattening  
L.H.P. Silva, D.E.F. Assis, M.M. Estrada, G.J.F. Assis, G.D.R. Zamudio, G.B. Carneiro, S.C. Valadares Filho, M.F. Paulino and M.L. Chizzotti 28
- The effect of pen design on pen floor cleanliness in farrowing pens for loose housed lactating sows  
K.E. Bøe, E.J.S. Hall and G.M. Cronin 37
- Effect of environmental enrichment with wood materials and straw pellets on the metabolic status of sows during gestation  
H. Quesnel, B. Peuteman, M.-C. Père, I. Louveau, L. Lefaucheur, M.-H. Perruchot, A. Prunier, M.C. Meunier-Salaün, D. Gardan-Salmon, F. Gondret and E. Merlot 43
- Genomic analysis of the population structure in horses of the Brazilian Mangalarga Marchador breed  
B.A. dos Santos, G.L. Pereira, F.d.O. Bussiman, V.R. Paschoal, S.M. de Souza Júnior, J.C.d.C. Balieiro, L.A.L. Chardulo and R.A. Curi 49
- Reaction norm models for the study of genotype  $\times$  methionine + cystine level interaction in meat-type quail  
G.C. Gouveia, F. Ferreira, L.R.A. Abreu, V.M.P. Ribeiro, B.M.M. Rocha, F.L.B. Toral and M.A. Silva 56
- Genome-wide associations and detection of candidate genes for direct and maternal genetic effects influencing growth traits in the Montana Tropical® Composite population  
L. Grigoletto, L.F. Brito, E.C. Mattos, J.P. Eler, F.O. Bussiman, B.d.C.A. Silva, R.P. da Silva, F.E. Carvalho, M.P. Berton, F. Baldi and J.B.S. Ferraz 64
- Reproductive performance of cows and genetic correlation with weight gains and principal components of traits used in selection of Nelore cattle  
P.I. Schmidt, I.A. Ferreira, D.D. Silveira, G.S. Campos, F.R.P. Souza, R. Carvalheiro and A.A. Boligon 77
- Genetic parameters of reproductive traits from artificial insemination records of Japanese Black cows  
A. Setiaji and T. Oikawa 85
- Intake, milk production and grazing behaviour responses of strip-grazing dairy goats to daily access time to pasture and to dehydrated lucerne supplementation  
A. Charpentier, H. Caillat, F. Gastal and R. Delagarde 90
- Unraveling the effect of body structure score on phenotypic plasticity for body weight at different ages in Guzerat cattle  
L.F.M. Mota, L.S. Costa, N.A.M. Garzón, T.L. Passafaro, D.O. Silva, L.R.A. Abreu, L.L. Verardo, C.M. Bonafé and H.T. Ventura 98
- Genomic evaluation of genotype by prenatal nutritional environment interaction for maternal traits in a composite beef cattle breed  
E.H. Hay and A. Roberts 118
- Effect of inclusion rate of corn silage in ensiled total mixed ration on dry matter intake, nutrient digestibility, and ruminal fermentation in Japanese Wagyu steer  
K. Hosoda, H. Ohmori, Y.-n. Nakamura and M. Kamiya 126
- Genetic parameters for linear type traits including locomotion in Italian Jersey cattle breed  
C. Roveglia, G. Niero, T. Bobbo, M. Penasa, R. Finocchiaro, G. Visentin, N. Lopez-Villalobos and M. Cassandro 131
- Effect of dietary valine supplementation to low protein diets on performance, intestinal morphology and immune responses in broiler chickens  
S. Allameh and M. Toghyani 137
- Different assessment systems fail to agree on the evaluation of dairy cattle welfare at farm level  
G. De Rosa, R. Di Palo, R. Serafini, F. Grasso, A. Bragaglio, A. Braghieri and F. Napolitano 145

