

**Genetics, Animal Genetic Resources and Breeding**

- Meta-analysis of genetic parameter estimates for reproduction, growth and carcass traits of pigs in the tropics  
E.C. Akanno, F.S. Schenkel, V.M. Quinton, R.M. Friendship and J.A.B. Robinson ..... 101
- Genetic parameters for test-day milk yield, 305-day milk yield, and lactation length in Guzerat cows  
D.J.A. Santos, M.G.C.D. Peixoto, R.R.A. Borquis, R.S. Verneque, J.C.C. Panetto and H. Tonhati ..... 114
- Genetic correlations between milk production traits and somatic cell scores on test day within and across first and second lactations in Holstein cows  
T. Yamazaki, K. Hagiya, H. Takeda, O. Sasaki, S. Yamaguchi, M. Sogabe, Y. Saito, S. Nakagawa, K. Togashi, K. Suzuki and Y. Nagamine ..... 120
- Genetic analysis of functional and non-functional teats in a population of Yorkshire pigs  
H. Chalkias, L. Rydhmer and N. Lundeheim ..... 127
- Principal components and factor analytic models for birth to mature weights in Nellore cattle  
A.A. Boligon, A.B. Bignardi, M.E.Z. Mercadante, R.B. Lôbo and L.G. Albuquerque ..... 135

**Short communication**

- An association analysis between polymorphisms of the pig solute carrier family 27A (*SLC27A*), member 1 and 4 genes and serum and muscle lipid traits  
C. Melo, D. Gallardo, R. Quintanilla, A. Zidi, A. Castelló, I. Díaz, M. Amills and R.N. Pena ..... 143

**Ruminant Nutrition**

- Characteristics of fat and muscle from beef heifers offered a grass silage or concentrate-based finishing ration  
A.P. Moloney and M.J. Drennan ..... 147
- Intake of conserved and grazed grass and performance traits in beef suckler cows differing in phenotypic residual feed intake  
P. Lawrence, D.A. Kenny, B. Earley and M. McGee ..... 154

**Non-Ruminant Nutrition**

- Effects of live yeast supplementation to gestation and lactation diets on reproductive performance, immunological parameters and milk composition in sows  
Y.D. Jang, K.W. Kang, L.G. Piao, T.S. Jeong, E. Auclair, S. Jonvel, R. D'Inca and Y.Y. Kim ..... 167
- Effects of feeding corn distiller's dried grains with solubles with and without enzyme cocktail supplementation to laying hens on performance, egg quality, selected manure parameters, and feed cost  
G. Deniz, H. Gencoglu, S.S. Gezen, I.I. Turkmen, A. Orman and C. Kara ..... 174
- Effect of dietary supplementation of *Spirulina* (*Arthrospira platensis*) and *Thyme* (*Thymus vulgaris*) on growth performance, apparent digestibility and health status of companion dwarf rabbits  
A. Dalle Zotte, A. Sartori, P. Bohatir, H. Réminon and R. Ricci ..... 182
- Effects of maize naturally contaminated with aflatoxin B<sub>1</sub> on growth performance, blood profiles and hepatic histopathology in ducks  
J. He, K.Y. Zhang, D.W. Chen, X.M. Ding, G.D. Feng and X. Ao ..... 192

(Contents continued on last page of this issue)

*(Contents continued)*

<b>Effects of vitamin E and selenium yeast on growth performance and immune function in ducks fed maize naturally contaminated with aflatoxin B<sub>1</sub></b> J. He, K.Y. Zhang, D.W. Chen, X.M. Ding, G.D. Feng and X. Ao . . . . .	200
<b>Behaviour, Health and Welfare</b>	
<i>Review Papers</i>	
<b>Group gestation housing with individual feeding—I: How feeding regime, resource allocation, and genetic factors affect sow welfare</b> C.J. Bench, F.C. Rioja-Lang, S.M. Hayne and H.W. Gonyou . . . . .	208
<b>Group gestation sow housing with individual feeding—II: How space allowance, group size and composition, and flooring affect sow welfare</b> C.J. Bench, F.C. Rioja-Lang, S.M. Hayne and H.W. Gonyou . . . . .	218
<b>Livestock Farming Systems and Management</b>	
<b>Factors influencing adoption of improved grassland management by small-scale dairy farmers in central Mexico and the implications for future research on smallholder adoption in developing countries</b> C.G. Martínez-García, P. Dorward and T. Rehman . . . . .	228
<b>Greenhouse gas emission intensities of grass silage based dairy and beef production: A systems analysis of Norwegian farms</b> H. Bonesmo, K.A. Beauchemin, O.M. Harstad and A.O. Skjelvåg . . . . .	239
<b>Quantitative associations between outdoor climate data and weaning-to-first-mating interval or adjusted 21-day litter weights during summer in Japanese swine breeding herds</b> R. Iida and Y. Koketsu . . . . .	253
<b>Feed–milk–manure nitrogen relationships in global dairy production systems</b> J.M. Powell, M. MacLeod, T.V. Vellinga, C. Opio, A. Falcucci, G. Tempio, H. Steinfeld and P. Gerber . . . . .	261
<b>Reproduction Physiology</b>	
<b>Cervical mucus characteristics and periestrual hormone concentration in relation to ovulation time in Zebu (Sahiwal) cattle</b> S.S. Layek, T.K. Mohanty, A. Kumaresan, K. Behera and S. Chand . . . . .	273