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Genetics, Animal Genetic Resources and Breeding

Original research articles

Evaluation by re-derivation of a paternal line after 18 generations on seminal traits, proteome and fertility		Hierarchical clustering analysis based on metabolite levels in the hemolymph of different genetic strains of silkworm (<i>Bombyx mori</i> L., 1758) with regard to cocoon shell to cocoon weight ratio	
J.D. Juárez, F. Marco-Jiménez, A.M. Talaván, X. García-Domínguez, M.P. Viudes-de-Castro, R. Lavara and J.S. Vicente	103894	A. Seidavi, Z. Hossain, N.G. Rubiu and M.G. Cappai	103916
Economic selection index to improve fiber quality in Mongolian Cashmere goats		Demographic structure and population dynamics of Maremmana cattle local breed after 35 years of traditional selection	
B. Tseveenjav, D.J. Garrick, E. Batjargal and Z. Yondon	103898	M. Fioretti, R. Negrini, S. Biffani, A. Quaglia, A. Valentini and A. Nardone	103903
Genetic diversity, population structure and runs of homozygosity in Ethiopian short fat-tailed and Awassi sheep breeds using genome-wide 50k SNP markers		Assessing economic consequences of improved animal welfare in Swedish cattle fattening operations using a stochastic partial budgeting approach	
T. Getachew, A. Haile, G. Mészáros, B. Rischkowsky, H.J. Huson, S. Gizaw, M. Wurzinger, A.O. Mwai and J. Sölkner	103899	H. Ahmed, K. Alvåsen, C. Berg, H. Hansson, J. Hultgren, H. Röcklinsberg and U. Emanuelson	103920
Genome association of carcass and palatability traits from <i>Bos indicus</i> - <i>Bos taurus</i> crossbred steers within electrical stimulation status and correspondence with steer temperament 2. Palatability		Genetic correlations between scrotal circumference, heifer fertility and stayability in Charolais-Charbray cattle	
D.G. Riley, R.K. Miller, K.L. Nicholson, C.A. Gill, A.D. Herring, P.K. Riggs, J.E. Sawyer, J.W. Savell and J.O. Sanders	103897	G. Martínez-Velázquez, A. Ríos-Utrera, S.I. Román-Ponce, J.J. Baeza-Rodríguez, M.E. Arechavaleta-Velasco, M. Montaño-Bermúdez and V.E. Vega-Murillo	103914
Automated computer vision system to predict body weight and average daily gain in beef cattle during growing and finishing phases		Genetic heterogeneity of white markings in Quarter Horses	
A. Cominotte, A.F.A. Fernandes, J.R.R. Dorea, G.J.M. Rosa, M.M. Ladeira, E.H.C.B.. van Cleef, G.L. Pereira, W.A. Baldassini and O.R. Machado Neto	103904	S.V.S.A. Maciel, V.H.O. de Queiroz, C.A.A. de Oliveira, F.N. de Godói, G.L. Pereira, R.A. Curi, R.B. Costa and G.M.F. de Camargo	103935
Breeding objectives and practices in three local cattle breed production systems in Burkina Faso with implication for the design of breeding programs		<i>Short communication</i>	
D. Ouédraogo, A. Soudré, S. Ouédraogo-Koné, B.L. Zoma, B. Yougbaré, N. Khayatzadeh, P.A. Burger, G. Mészáros, A. Traoré, O.A. Mwai, M. Wurzinger and J. Sölkner	103910	Genetic diversity of <i>TLR3</i> and <i>TLR8</i> genes among five Chinese native cattle breeds from southwest China	
Different beef breed sires used for crossbreeding with Swedish dairy cows - effects on calving performance and carcass traits		Y. Chen, Y. Yang, C. Li, R. Li, H. Xiao and S. Chen	103895
S. Eriksson, P. Ask-Gullstrand, W.F. Fikse, E. Jonsson, J.-Å. Eriksson, H. Stålhammar, A. Wallenbeck and A. Hessle	103902	Effect of the rate of artificial insemination and paternity knowledge on the genetic gain for French meat sheep breeding programs	
Genotype-environment interaction for age at first calving in Limousine and Charolais cattle raised in Italy, employing reaction norm model		J. Raoul and J.-M. Elsen	103932
M.P.G. de Rezende, C.H.M. Malhado, S. Biffani, P.L.S. Carneiro, J.A. Carrillo and R. Bozzi	103912	Ruminant Nutrition	
Accuracy of estimates of milk production per lactation from limited test-day and recall data collected at smallholder dairy farms		Effects of soybean oil or various levels of whole cottonseed on growth performance, carcass traits, and meat quality of finishing bulls	
S.A. Migose, A. van der Linden, B.O. Bebe, I.J.M. de Boer and S.J. Oosting	103911	V.N. de Gouvêa, M.V. Biehl, T.S. Andrade, M.V. de Castro Ferraz Junior Junior, E.M. Ferreira, D.M. Polizel, D.S. Antonelo, A.M. Bridi, F.N. Owens and A.V. Pires	103934
<i>Original research articles</i>		<i>Modelling effects of carcass weight, dietary concentrate and protein levels on the CH₄ emission, N and P excretion of dairy bulls</i>	
		P. Huhtanen and A. Huuskanen	103896
		Sensitivity of greenhouse gas emissions to extreme differences in forage production of dairy farms	
		T. Senya Kiesse, M.S. Corson, G. Le Galludec and A. Wilfart	103906

Effect of processing methods (Rolling, steam-flaking, pelleting) on protein molecular structure profile, rumen degradation, and intestinal digestion of cool-climate adapted oats grain in comparison with barley grain in western Canada

M.R. Tosta, L.L. Prates, D.A. Christensen and P.Yu

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Post-weaning rumen fermentation of Simmental calves in response to weaning age and relationship with rumination time measured by the Hr-Tag rumination-monitoring system

V. Lopreiato, M. Vailati-Riboni, V.M. Morittu, D. Britti, F. Piccioli-Cappelli, E. Trevisi and A. Minuti

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Non-Ruminant Nutrition

Original research articles

Soybean oil alleviates maternal conjugated linoleic acid dietary-induced hatchability decrease and embryo hepatic lipolysis in broiler breeders

C. Fu, Y. Zhang, T. Shi, X. Wei and X. Liu

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Dietary supplementation of sodium butyrate for mixed-parity sows during lactation

E.H.M. Vieira, P.H. Watanabe, T.S. Andrade, G.G.A. Araújo, B.A.N. Silva, R.R.S. Pinheiro and I.B. Mendonça

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Dietary enzymatically treated *Artemisia annua* L.

supplementation improved growth performance and intestinal antioxidant capacity of weaned piglets

Y. Niu, J.T. He, Y.W. Zhao, Z.D. Gan, M.M. Shen, L.L. Zhang and T. Wang

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Behaviour, Health and Welfare

Original research articles

Comparison of egg production, quality and composition in three production systems for laying hens

F.X. Philippe, Y. Mahmoudi, D. Cinq-Mars, M. Lefrançois, N. Moula, J. Palacios, F. Pelletier and S. Godbout

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Livestock Farming Systems and Management

Original research articles

An attempt of implementation of immunocastration in swine production – impact on meat physicochemical quality and boar taint compound concentration in the meat of two native pig breeds

E.R. Grela, M. Świątkiewicz, E. Kowalcuk-Vasilev, M. Florek, U. Kosior-Korzecka and P. Skalecki

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Genome-wide association studies of beef cow terrain-use traits using Bayesian multiple-SNP regression

C.F. Pierce, S.E. Speidel, S.J. Coleman, R.M. Enns, D.W. Bailey, J.F. Medrano, A. Cánovas, P.J. Meiman, L.D. Howery, W.F. Mandeville and M.G. Thomas

Physiology

Original research articles

Supplementing a yeast-derived product to feedlot cattle consuming monensin: Impacts on performance, physiological responses, and carcass characteristics

S. Pancini, R.F. Cooke, A.P. Brandão, N.W. Dias, C.L. Timlin, P.L.P. Fontes, A.F.F. Sales, J.C. Wicks, A. Murray, R.S. Marques, K.G. Pohler and V.R.G. Mercadante

Carcass characteristics and meat quality of commercial lambs reared in different forage systems

Y. Ye, N.M. Schreurs, P.L. Johnson, R.A. Corner-Thomas, M.P. Agnew, P. Silcock, G.T. Eyres, G. MacLennan and C.E. Realini

Implications of nutritional modulators in productive performance of pregnant and lactating sows

L.P. Pereira, J.O. Hilgemberg, A.P.H. Mass and C.R. Lehnen

Short communication

Fatty acid composition of the intramuscular fat in the *longissimus thoracis* muscle of Apulo-Calabrese and crossbreed pigs

G. Aboagye, M. Zappaterra, F. Pasini, S. Dall'Olio, R. Davoli and L. Nanni Costa

Reproduction Physiology

Original research articles

Effects of L-carnitine on embryo development of vitrified swamp buffalo oocytes following in vitro fertilization

Y. Liang, T. Yoisungnern, Y. Huang and R. Parnpai