

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

Genetic parameters and selection strategies for female fertility and litter quality traits in organic weaner production systems with closed breeding systems  
S. Klein, H.R. Brandt and S. König

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Genomic characterization of Algerian Guelmoise cattle and their genetic relationship with other North African populations inferred from SNP genotyping arrays  
S. Ben Jemaa, O. Rahal, S.B.S. Gaouar, S. Mastrangelo, M. Boussaha and E. Ciani

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Genomic study for maternal related traits in Santa Inês sheep breed

S.T. Amorim, S. Kluska, M.P. Berton, M.V.A. de Lemos, E. Peripolli, N.B. Stafuzza, J.F. Martin, M.S. Álvarez, B.V. Gaviña, M.A. Toro, G. Banchemo, P.S. Oliveira, L. Grigoletto, J.P. Eler, F. Baldi and J.B.S. Ferraz

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Association of single nucleotide polymorphisms in leptin (*LEP*) and leptin receptor (*LEPR*) genes with backfat thickness and daily weight gain in Ukrainian Large White pigs

V. Balatsky, Y. Oliinychenko, N. Sarantseva, A. Getya, A. Saienko, V. Vovk and O. Doran

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Deepening the knowledge about dermatosparaxis in Brazilian White Dorper population: Basis for the development and implementation of a genetic disease eradication program in sheep

J.F. Nogueira, A.S. Borges, D.G.A. de Andrade, F.C.M. Bezerra, J.P. de Oliveira-Filho, S.M.F. Cunha, G.V. Gouveia and J.J.d.S. Gouveia

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Effect of calcium and magnesium supplementation on minerals profile, immune responses, and energy profile of ewes and their lambs

F. Ataollahi, M. Friend, S. McGrath, G. Dutton, A. Peters and M. Bhanugopan

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*Short communication*

Multi-trait estimation of genetic parameters for body weight in a commercial broiler chicken population  
W. Mebratie, P. Madsen, R. Hawken and J. Jensen

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Polymorphisms of  $\alpha$ -lactalbumin,  $\beta$ -lactoglobulin and prolactin genes are highly associated with milk composition traits in Spanish Merino sheep

P. Padilla, M. Izquierdo, M. Martínez-Trancón, J.C. Parejo, A. Rabasco, J. Salazar and J.Á. Padilla

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Validation of the *POLLED* Celtic variant in South African Bonsmara and Drakensberger beef cattle breeds

R. Grobler, C. Visser, A. Capitan and E. van Marle-Köster

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**Ruminant Nutrition***Original research articles*

Unravelling biological biotypes for growth, visual score and reproductive traits in Nellore cattle via principal component analysis

G. Vargas, F.S. Schenkel, L.F. Brito, H.H.d.R. Neves, D.P. Munari, A.A. Boligon and R. Carvalheiro

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Evaluation of collection days and times to estimate urinary excretion of purine derivatives and nitrogen compounds in grazing Nellore cattle

J.M. Silva Júnior, L.N. Rennó, S.C. Valadares Filho, M.F. Paulino, E. Detmann, G.C.C. Menezes, T.S. Martins, R.M. Paula, J.P.P. Rodrigues and M.I. Marcondes

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Effects of dietary soybean oil and coated folic acid on ruminal digestion kinetics, fermentation, microbial enzyme activity and bacterial abundance in Jinnan beef steers

C. Wang, Q. Liu, G. Guo, W.J. Huo, L. Ma, Y.L. Zhang, C.X. Pei, S.L. Zhang and H. Wang

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The time after feeding alters methane emission kinetics in Holstein dry cows fed with various restricted diets

Y. Blaise, A.L.H. Andriamandroso, Y. Beckers, B. Heinesch, E.C. Muñoz, H. Soyeurt, E. Froidmont, F. Lebeau and J. Bindelle

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Particle size distribution of forages and mixed rations, and their relationship with ration variability and performance of UK dairy herds

U. Tayyab, R.G. Wilkinson, C.K. Reynolds and L.A. Sinclair

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**Behaviour, Health and Welfare***Original research articles*

The effect of lameness-causing lesions on milk yield and fertility of primiparous Holstein cows in a hot environment

M. Mellado, E. Saavedra, L. Gaytán, F.G. Veliz, U. Macías-Cruz, L. Avendaño-Reyes and E. García

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Investigating the relationship between human-animal interactions, reactivity, stress response and reproductive performance in Nellore heifers

M.C. Ceballos, A.C. Sant'Anna, K.C.R. Góis, A.S. Ferraudo, J.A. Negro and M.J.R.P. da Costa

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Effects of repeated social mixing on behavior and blood immune cells of group-housed pregnant sows (*Sus scrofa domestica*)

C. Schalk, B. Pfaffinger, S. Schmucker, U. Weiler and V. Stefanski

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**Livestock Farming Systems and Management***Original research articles*

Morning and evening pasture access – comparing the effect of production pasture and exercise pasture on milk production and cow behaviour in an automatic milking system

H. Kismul, E. Spörndly, M. Höglind, G. Næss and T. Eriksson

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Effects of feeding level, type of forage and milking time on milk lipolytic system in dairy cows

E. Vanbergue, J.L. Peyraud, A. Ferlay, G. Miranda, P. Martin and C. Hurtaud

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Anthelmintic resistance in cattle: A systematic review and meta-analysis

B.H.B. Baiak, C.R. Lehnen and R.A. da Rocha

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## Physiology

### *Original research articles*

N-Acetyl cysteine improves performance, reproduction, antioxidant status, immunity and maternal antibody transmission in breeder Japanese quail under heat stress condition

K. Omid, S. Amirali and K. Ahmad

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Estimated heat production, blood parameters and mitochondrial DNA copy number of Nelore bulls (*Bos indicus*) with high and low residual feed intake

W.A. Baldassini, J.J. Ramsey, R.H. Branco, S.F.M. Bonilha, M.R. Chiaratti, A.S. Chaves and D.P.D. Lanna

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## Reproduction Physiology

### *Original research articles*

The combination of  $\beta$ -carotene and vitamins improve the pregnancy rate at first fixed-time artificial insemination in grazing beef cows

V.N.d. Gouvêa, M.H.A. Colli, W.A.G. Junior, J.C.L. Motta, T.S. Acedo, G.d.S.F.M.d. Vasconcellos, L.F.M. Tamassia, F.M. Elliff, R.D. Mingoti and P.S. Baruselli

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