

CONTENTS

Breeding and genetics

- Inoue, K., Kobayashi, M., Shoji, N. and Kato, K.*
Genetic parameters for fatty acid composition and feed efficiency traits in Japanese Black cattle 987

- Gizaw, S., Getachew, T., Tibbo, M., Haile, A. and Dessie, T.*
Congruence between selection on breeding values and farmers' selection criteria in sheep breeding under conventional nucleus breeding schemes 995

Nutrition

- Andueza, D., Picard, F., Jestin, M., Andrieu, J. and Baumont, R.*
NIRS prediction of the feed value of temperate forages: efficacy of four calibration strategies 1002

- Wilkinson, J. M.*
Re-defining efficiency of feed use by livestock 1014

- Annett, R. W., Carson, A. F., Dawson, L. E. R. and Kilpatrick, D. J.*
Effects of dam breed and dietary source of *n*-3 polyunsaturated fatty acids on the growth and carcass characteristics of lambs sourced from hill sheep flocks 1023

Physiology and functional biology of systems

- Woelders, H., Te Pas, M. F. W., Bannink, A., Veerkamp, R. F. and Smits, M. A.*
Systems biology in animal sciences 1036

- Zhang, W. and Shi, F.*
Do genetically modified crops affect animal reproduction? A review of the ongoing debate 1048

- Martin, K. M., McGilchrist, P., Thompson, J. M. and Gardner, G. E.*
Progeny of high muscling sires have reduced muscle response to adrenaline in sheep 1060

- Hausman, G. J., Barb, C. R. and Dean, R. G.*
Gene expression profiling in developing pig adipose tissue: non-secreted regulatory proteins 1071

- Chen, J., Wang, M., Kong, Y., Ma, H. and Zou, S.*
Comparison of the novel compounds creatine and pyruvate on lipid and protein metabolism in broiler chickens 1082

- Gruffat, D., Gobert, M., Durand, D. and Bauchart, D.*
Distinct metabolism of linoleic and linolenic acids in liver and adipose tissues of finishing Normande cull cows 1090

Behaviour, welfare and health

- Masanetz, S., Preißinger, W., Meyer, H. H. D. and Pfaffl, M. W.*
Effects of the prebiotics inulin and lactulose on intestinal immunology and hematology of preruminant calves 1099

- Vanhonacker, F. and Verbeke, W.*
Consumer response to the possible use of a vaccine method to control boar taint v. physical piglet castration with anaesthesia: a quantitative study in four European countries 1107

- Millet, S., Gielkens, K., De Brabander, D. and Janssens, G. P. J.*
Considerations on the performance of immunocastrated male pigs 1119

Product quality, human health and well-being

- Brogna, D. M. R., Nasri, S., Ben Salem, H., Mele, M., Serra, A., Bella, M., Priolo, A., Makkar, H. P. S. and Vasta, V.*
Effect of dietary saponins from *Quillaja saponaria* L. on fatty acid composition and cholesterol content in muscle *Longissimus dorsi* of lambs 1124

- Peinado, J., Serrano, M. P., Medel, P., Fuentetaja, A. and Mateos, G. G.*
Productive performance, carcass and meat quality of intact and castrated gilts slaughtered at 106 or 122 kg BW 1131

- Turner, T., Pickova, J., Ertbjerg, P., Lindqvist, H., Nadeau, E., Hymøller, L. and Lundström, K.*
Influence of vitamins A, D₃ and E status on *post-mortem* meat quality in steers under winter housing or pasture finishing systems 1141