

CONTENTS

Breeding and genetics

Tusell, L., Pérez-Rodríguez, P., Forni, S., Wu, X.-L. and Gianola, D.

Genome-enabled methods for predicting litter size in pigs: a comparison 1739

Berry, D. P., Coyne, J., Coughlan, B., Burke, M., McCarthy, J., Enright, B., Cromie, A. R. and McParland, S.

Genetics of milking characteristics in dairy cows 1750

Pszczola, M., Veerkamp, R. F., de Haas, Y., Wall, E., Strabel, T. and Calus, M. P. L.

Effect of predictor traits on accuracy of genomic breeding values for feed intake based on a limited cow reference population 1759

Nutrition

Dunshea, F. R., Allison, J. R. D., Bertram, M., Boler, D. D., Brossard, L., Campbell, R., Crane, J. P., Hennessy, D. P., Huber, L., de Lange, C., Ferguson, N., Matzat, P., McKeith, F., Moraes, P. J. U., Mullan, B. P., Noblet, J., Quiniou, N. and Tokach, M.

The effect of immunization against GnRF on nutrient requirements of male pigs: a review 1769

Peinado, M. J., Echávarri, A., Ruiz, R., Suárez-Pereira, E., Ortiz Mellet, C., García Fernández, J. M. and Rubio, L. A.

Effects of inulin and di-D-fructose dianhydride-enriched caramels on intestinal microbiota composition and performance of broiler chickens 1779

Griffiths, W. M., Clark, C. E. F., Clark, D. A. and Waghorn, G. C.

Supplementing lactating dairy cows fed high-quality pasture with black wattle (*Acacia mearnsii*) tannin 1789

Wischer, G., Boguhn, J., Steingäß, H., Schollenberger, M. and Rodehutschord, M.

Effects of different tannin-rich extracts and rapeseed tannin monomers on methane formation and microbial protein synthesis *in vitro* 1796

Fiems, L. O., De Boever, J. L. and Vanacker, J. M.

Effect of supplementation on the performance of grazing Belgian Blue double-muscléd heifers 1806

Physiology and functional biology of systems

Hammond, K. J., Hoskin, S. O., Jopson, N. B., Mackintosh, C. G., Hofstra, G., Thompson, B. R. and Stevens, D. R.

Gastrointestinal tract development in red deer (*Cervus elaphus*) calves from 1 to 12 months of age 1816

Conneely, M., Berry, D. P., Sayers, R., Murphy, J. P., Lorenz, I., Doherty, M. L. and Kennedy, E.

Factors associated with the concentration of immunoglobulin G in the colostrum of dairy cows 1824

Cherfaoui, M., Durand, D., Bonnet, M., Bernard, L., Bauchart, D., Ortigues-Marty, I. and Gruffat, D.

A grass-based diet favours muscle n-3 long-chain PUFA deposition without modifying gene expression of proteins involved in their synthesis or uptake in Charolais steers 1833

Behaviour, welfare and health

van Wagenberg, C. P. A., Snoek, H. M., van der Fels, J. B., van der Peet-Schwering, C. M. C., Vermeer, H. M. and Heres, L.

Farm and management characteristics associated with boar taint 1841

Gerritzen, M. A., Hindle, V. A., Steinkamp, K., Reimert, H. G. M., van der Werf, J. T. N. and Marahrens, M.

The effect of reduced loading density on pig welfare during long distance transport 1849

Leruste, H., Bokkers, E. A. M., Sergeant, O., Wolthuis-Fillerup, M., van Reenen, C. G. and Lensink, B. J.

Effects of the observation method (direct v. from video) and of the presence of an observer on behavioural results in veal calves 1858

Farming systems and environment

Azaza, M. S., Assad, A., Maghrbi, W. and El-Cafsi, M.

The effects of rearing density on growth, size heterogeneity and inter-individual variation of feed intake in monosex male Nile tilapia *Oreochromis niloticus* L. 1865

Fredeen, A., Juurlink, S., Main, M., Astatkie, T. and Martin, R. C.

Implications of dairy systems on enteric methane and postulated effects on total greenhouse gas emission 1875

Product quality, human health and well-being

Pardo, C. E., Kreuzer, M. and Bee, G.

Effect of average litter weight in pigs on growth performance, carcass characteristics and meat quality of the offspring as depending on birth weight 1884

Fantuz, F., Ferraro, S., Todini, L., Mariani, P., Piloni, R. and Salimei, E.

Essential trace elements in milk and blood serum of lactating donkeys as affected by lactation stage and dietary supplementation with trace elements 1893