

### **Animal Part 3**

#### **Contents**

**Page**

#### **Breeding and genetics**

*M. Chimonyo and K. Dzama*

Estimation of genetic parameters for growth performance and carcass traits in Mukota pigs 317

*C. M. R. de Melo, I. U. Packer, C. N. Costa and P. F. Machado*

Genetic parameters for test day milk yields of first lactation Holstein cows by random regression models 325

#### **Nutrition**

*N. I. Nielsen, N. C. Friggens, T. Larsen, J. B. Andersen, M. O. Nielsen and K. L. Ingvarsen*

Effect of changes in diet energy density on feed intake, milk yield and metabolic parameters in dairy cows in early lactation 335

*S. Haldar, S. Samanta, R. Banarjee, B. Sharma and T.K Ghosh*

Glucose tolerance and serum concentrations of hormones and metabolites in goats (*Capra hircus*) fed diets supplemented with inorganic and organic chromium salts 347

*R. Barea, R. Nieto and J. F. Aguilera*

Effects of the dietary protein content and the feeding level on protein and energy metabolism in Iberian pigs growing from 50 to 100 kg body weight 357

*S. Fleige, W. Preißinger, H.H.D. Meyer and M.W. Pfaffl*

Effect of lactulose on growth performance and intestinal morphology of pre-ruminant calves using a milk replacer containing *Enterococcus faecium* 367

*C. K. Reynolds, D. E. Beever, W. Steinberg and A. J. Packington*

Net nutrient absorption and liver metabolism in lactating dairy cows fed supplemental dietary biotin 375

*W. Wattanakul, J. A. Rooke, A. H. Stewart, P. R. English and S. A. Edwards*

Effect of milk deprivation during the lactation period on performance and digestive enzyme activities of the piglets following weaning 381

*K. Partanen, T. Jalava and J. Valaja*

Effects of a dietary organic acid mixture and of dietary fibre levels on ileal and faecal nutrient apparent digestibility, bacterial nitrogen flow, microbial metabolite concentrations and rate of passage in the digestive tract of pigs 389

#### **Physiology and functional biology of systems**

*K. Coste, D. Gallot, G. Marceau, J. Jani, J. Deprest, A. Labbé, D. Lémery and V. Sapin*

Expression of retinoid receptors during rabbit lung development 403

*E. Pereira, H. N. Oliveira, J. P. Eler, J. A. II de V. Silva and M. H. Van Melis*

Comparison among three approaches for evaluation of sexual precocity in Nellore cattle 411

*P. Chemineau, B. Malpoux, J. P. Brillard and A. Fostier*

Seasonality of reproduction and production in farm fishes, birds and mammals (*Review*) 419

#### **Behaviour, welfare and health**

*S. Colson, C. Arnould and V. Michel*

Motivation to dust-bathe of laying hens housed in cages and in aviaries 433

*T. Kristensen, F. Oudshoorn, L. Munksgaard and K. Sjøgaard*

Effect of time at pasture combined with restricted indoor feeding on production and behaviour in dairy cows 439

**Farming systems and environment**

*K. Osoro, U. García, B. M. Jáuregui, L. M. M. Ferreira, A. J. Rook and R. Celaya*

Diet selection and live-weight changes of two breeds of goats grazing on heathlands 449

*A. B. Rodríguez, R. Bodas, B. Fernández, O. López-Campos, A. R. Mantecón and F. J. Giráldez*

Feed intake and performance of growing lambs raised on concentrate-based diets under cafeteria feeding systems 459

**Product quality, health and well-being**

*A. Roy, J.-M. Chardigny, D. Bauchart, A. Ferlay, S. Lorenz, D. Durand, D. Gruffat, Y. Faulconnier,*

*J.-L. Sébédio and Y. Chilliard*

Butters rich either in *trans*-10-C18:1 or in *trans*-11-C18:1 plus *cis*-9, *trans*-11 CLA differentially affect plasma lipids and aortic fatty streak in experimental atherosclerosis in rabbits 467

*M. N. C. Harder, S. G. Canniatti-Brazaca, A. A. D. Coelho, V. J. M. Savino and C. F. O. Franco*

Cholesterol and iron availability in yolk of laying hens feed with annatto (*Bixa orellana*) 477