

# ANIMAL PRODUCTION SCIENCE

## CONTENTS Volume 53, Issue 5, 2013, 369–477

The oral administration of meat and bone meal-derived protein fractions improved the performance of young broiler chicks

*W. I. Muir, G. W. Lynch, P. Williamson and A. J. Cowieson* 369–377

Steam-pelleting temperatures, grain variety, feed form and protease supplementation of mediumly ground, sorghum-based broiler diets: influences on growth performance, relative gizzard weights, nutrient utilisation, starch and nitrogen digestibility

*P. H. Selle, S. Y. Liu, J. Cai and A. J. Cowieson* 378–387

Optimal dietary zinc levels of broiler chicks fed a corn–soybean meal diet from 22 to 42 days of age

*Xiudong Liao, Ang Li, Lin Lu, Songbai Liu, Sufen Li, Liyang Zhang, Guangying Wang and Xugang Luo* 388–394

Genetic parameters and phenotypic trends in the mean and variability of number of stillborn piglets and changes in their relationships with litter size and gestation length

*Craig R. G. Lewis and Susanne Hermes* 395–402

Genetic polymorphism at the *CSN1S1* gene in Girgentana dairy goat breed

*S. Mastrangelo, M. T. Sardina, M. Tolone and B. Portolano* 403–406

A survey of free and conjugated deoxynivalenol in the 2009, 2010 and 2011 cereal crops in Australia

*S. T. Tran and T. K. Smith* 407–412

Effects of increasing supplementation levels of rice bran on milk production and fatty acid composition of milk in Saanen dairy goats

*J. K. Park, E. G. Kwon and C.-H. Kim* 413–418

Effect of inclusion of grasses and wet hulless-barley distillers' grains on the fermentation and nutritive quality of oat straw- and straw-grass silages in Tibet

*XianJun Yuan, ChengQun Yu, ZhiHua Li, M. Shimojo and Tao Shao* 419–426

Effect of cereal and pea monocultures and combinations and silage additives on whole-crop cereal silage nutritive and fermentation characteristics

*J. L. Jacobs and G. N. Ward* 427–436

Potential impacts of negative associative effects between concentrate supplements, pasture and conserved forage for milk production and dairy farm profit

*C. K. M. Ho, B. Malcolm and P. T. Doyle* 437–452

Effect of *Stylosanthes guianensis* supplementation on intake and nitrogen metabolism of *Bos indicus* cattle offered a basal diet of mixed rice straw and tropical grass

*Miranda Pen, Darryl B. Savage, John V. Nolan and Mom Seng* 453–457

Factors involved in high ewe losses in winter lambing flocks grazing dual-purpose wheat in southern New South Wales: a producer survey

*S. R. McGrath, J. J. Lievaart, J. M. Virgona, M. S. Bhanugopan and M. A. Friend* 458–463

A higher proportion of female lambs when ewes were fed oats and cottonseed meal prior to and following conception

*C. E. Gulliver, M. A. Friend, B. J. King, J. F. Wilkins and E. H. Clayton* 464–471

Evaluation of semen characteristics of the species *Mazama americana* in captivity

*Luciana Diniz Rola, Eveline dos Santos Zanetti and José Mauricio Barbanti Duarte* 472–477