

# ANIMAL PRODUCTION SCIENCE

**CONTENTS** Volume 52, Issue 1, 2012, 1–72

## RESEARCH PAPERS

Genetic analysis of feet and leg traits of Australian Angus cattle using linear and threshold models

*Gilbert Jeyaruban, Bruce Tier, David Johnston and Hans Graser* 1–10

Reproductive performance and survival of Chinese Holstein dairy cows in central China

*J. J. Wu, D. C. Wathes, J. S. Brickell, L. G. Yang, Z. Cheng, H. Q. Zhao, Y. J. Xu and S. J. Zhang* 11–19

Feeding management and feeds on dairy farms in New South Wales and Victoria

*E. Bramley, I. J. Lean, W. J. Fulkerson and N. D. Costa* 20–29

Damara sheep have higher digestible energy intake than Merino sheep when fed low-quality or high-quality feed

*M. J. Wilkes, P. I. Hynd and W. S. Pitchford* 30–34

The allometric relationship between mean fibre diameter of mohair and the fleece-free liveweight of Angora goats over their lifetime

*B. A. McGregor, K. L. Butler and M. B. Ferguson* 35–43

Synthetic and natural polyphenols with antioxidant properties stimulate rumen microbial growth *in vitro*

*Mirko Cattani, Franco Tagliapietra, Lucia Bailoni and Stefano Schiavon* 44–50

Effects of growth stage and position within the beam in the structure and chemical composition of sika deer (*Cervus nippon*) antlers

*Byong Tae Jeon, Kyoung Hoon Kim, Sun Hee Cheong, Sung Ki Kang, Pyo Jam Park, Dong Hyun Kim, Ho Sung Jung, Jae Hyun Park, David G. Thomas and Sang Ho Moon* 51–57

The interaction between ovulation rate and embryo survival in determining prolificacy of different strains of obese swine with gene polymorphisms for leptin receptors

*L. Torres-Rovira, P. Gonzalez-Añover, P. Pallares, M. L. Pérez-Solana, S. Astiz, E. Gomez-Izquierdo, R. Sanchez-Sanchez and A. Gonzalez-Bulnes* 58–63

Genetic mapping of quantitative trait loci affecting bodyweight on chromosome 1 in a commercial strain of Japanese quail

*A. K. Esmailizadeh, A. Baghizadeh and M. Ahmadizadeh* 64–68

The effect of sieve agitators and dispersing agent on the method of determining and expressing fineness of feed materials by sieving

*C. R. Stark and C. G. Chewning* 69–72