

ANIMAL PRODUCTION SCIENCE

CONTENTS Volume 54, Issues 1, 2014, 1–109

GENETICS TO IMPROVE COW REPRODUCTIVE PERFORMANCE IN TROPICAL BEEF CATTLE

Foreword iii

Genetics of early and lifetime annual reproductive performance in cows of two tropical beef genotypes in northern Australia

D. J. Johnston, S. A. Barwick, G. Fordyce, R. G. Holroyd, P. J. Williams, N. J. Corbet and T. Grant 1–15

Genomic selection for female reproduction in Australian tropically adapted beef cattle

Y. D. Zhang, D. J. Johnston, S. Bolormaa, R. J. Hawken and B. Tier 16–24

Factors associated with calf mortality in tropically adapted beef breeds managed in extensive Australian production systems

K. L. Bunter, D. J. Johnston, M. L. Wolcott and G. Fordyce 25–36

The genetics of cow growth and body composition at first calving in two tropical beef genotypes

M. L. Wolcott, D. J. Johnston, S. A. Barwick, N. J. Corbet and P. J. Williams 37–49

Genetic parameters for calf mortality and correlated cow and calf traits in tropically adapted beef breeds managed in extensive Australian production systems

K. L. Bunter and D. J. Johnston 50–59

Genetic relationships of female reproduction with growth, body composition, maternal weaning weight and tropical adaptation in two tropical beef genotypes

M. L. Wolcott, D. J. Johnston and S. A. Barwick 60–73

Genetic correlations of young bull reproductive traits and heifer puberty traits with female reproductive performance in two tropical beef genotypes in northern Australia

D. J. Johnston, N. J. Corbet, S. A. Barwick, M. L. Wolcott and R. G. Holroyd 74–84

Genetic relationships between steer performance and female reproduction and possible impacts on whole herd productivity in two tropical beef genotypes

M. L. Wolcott, D. J. Johnston, S. A. Barwick, N. J. Corbet and H. M. Burrow 85–96

Multi-trait assessment of early-in-life female, male and genomic measures for use in genetic selection to improve female reproductive performance of Brahman cattle

S. A. Barwick, D. J. Johnston, R. G. Holroyd, J. R. W. Walkley, and H. M. Burrow 97–109