

## HERITABILITY ESTIMATES FOR PRE AND POST-WEANING WEIGHTS OF CANCHIM CALVES

ARTUR H.G. DA SILVA, IRINEU U. PACKER  
AND PEDRO F. BARBOSA

Pre and post-weaning weights of 1565 Canchim calves born to 82 sires during the period 1958 through 1975 were analysed according to two mixed models. The first one included the effects of sire, birth year, birth month, sex, age of dam and generation of the calf. Second model included these effects plus the interactions between age of dam x sex, birth year x sex and birth month x sex. All animals of this breed were raised exclusively on pastures. Heritabilities were estimated from paternal half sib intraclass correlation.

Heritability estimates from both models were essentially the same. Estimates from the second model and respective errors of estimation were the following:  $0.34 \pm 0.08$ ;  $0.26 \pm 0.07$ ;  $0.31 \pm 0.08$ ;  $0.29 \pm 0.07$  and  $0.24 \pm 0.07$  for weights at birth, 205 days, 12, 18 and 24 months, respectively, and  $0.29 \pm 0.07$ ;  $0.11 \pm 0.05$  and  $0.14 \pm 0.06$  for body weight gains during the periods of 205 days to 12 months, 12 to 18 months and 18 to 24 months.