Abstract M44

Genetic parameters and genetic trends for pre and postweaning growth in a Colombian Blanco Orejinegro-Romosinuano-Angus-Zebu cattle population

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SUMMARY

Genetic parameters and trends for weaning weight adjusted to 200 d of age (WW240), and weight gain from weaning to 20 mo of age (WW120) were estimated in a Colombian beef cattle population composed of Blanco Orejinegro, Romosinuano, Angus, and Zebu beef breeds. Data were analyzed using multiple trait mixed model procedures. Genetic parameters and genetic trends were estimated using a restricted maximum likelihood (REML) algorithm. Genetic effects modelled were direct genetic, maternal genetic, permanent environmental maternal, and residual. Random effects for WW240 were direct genetic effects and random effects for WW120 was maternal genetic effect. The fixed effects of contemporary group were year × season. Calves, sires and dams were used to perform the genetic evaluations. Heritability estimates for additive direct genetic and maternal genetic effects were 0.43 ± 0.06 and 0.51 ± 0.06, respectively. Genetic trends were estimated between 1995 and 2006. 

RESULTS AND DISCUSSION

Genetic predictions and genetic parameter. Direct genetic trends for WW240 and WW120 were used, which included the fixed effects of contemporary group (Blanco Orejinegro, Romosinuano, Angus, and Zebu cattle), sex, age of dam (T), sex of sire (B), and sex of dam (D). 

LITERATURE CITED

