

INFLUENCE OF CALF SEX ON MILK PRODUCTION IN DAIRY GYR COWS

INFLUÊNCIA DO SEXO DO BEZERRO SOBRE A PRODUÇÃO DE LEITE EM VACAS DA RAÇA GIR LEITEIRO

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Many factors can influence milk yield. Among them are included the environmental, genetics factors and gene-environment interaction. Studies aiming to identify the magnitude of these factors are needed. The effect of calf sex on milk yield is controversial. Therefore, the objective of this work was to investigate the influence of calf gender on milk production along the lactation (P305) of Gyr cows. Data of 18,898 lactation records between the years of 1987 to 2013 were acquired in the official milk control of Brazilian Association of Zebu Breeders (ABCZ) database and analyzed by the least squares method. The linear model for P305 included the fixed effects of calf sex, contemporary group and age of cow at calving within the calf sex as co-variable linear and quadratic. Significant difference was found for the sex of the calf ($P < 0.01$) and the adjusted means of P305 of cows that gave birth to male and female calves were, respectively, 3,565.6 and 3,492.3 kg. Also, there was significant effect of the age of the cow at calving nested within sex of the calf ($P < 0.01$). For female calves the linear and quadratic regression coefficients for the cow age at calving were 17.32 and -0.077 kg, respectively. When the calves were male these coefficients were 21.23 and -0.098 kg, describing a quadratic relation which the production peak was observed at 104 months of age. Hence, Gyr cows produce significantly more milk for sons than for daughters across lactation. This fact could be explained by the fact of male calves normally born heavier than female ones and by the fact of Gyr cows require mostly the presence of the calf to produce milk along the lactation. Thus, might have a physiological adaptation by the Gyr cows to provide more feed for the heaviest calves, generally, male calves.

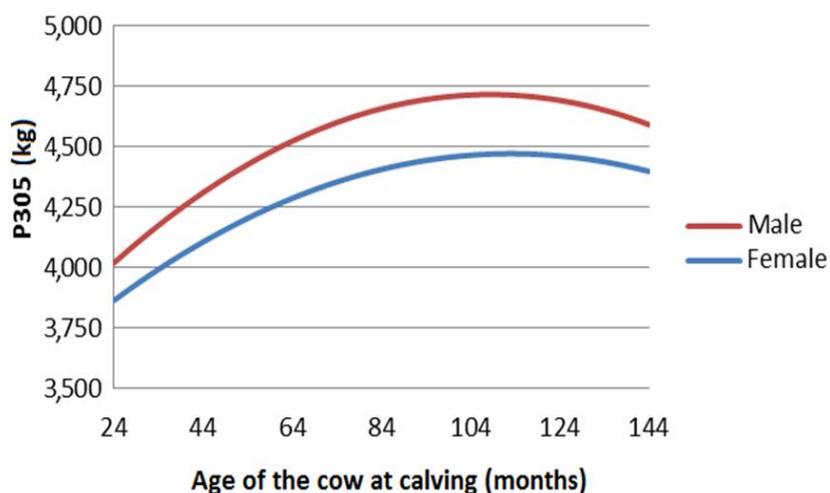


Figura 1. Effect of the age of cow at calving nested within sex of the calf on the milk production.

Keywords: calf weight, lactation, zebu dairy cattle.