

# SOME NON GENETIC EFFECTS ON PRE AND POST-WEANING WEIGHTS OF CANCHIM CALVES

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Data from 1565 Canchim calves born during the period of 1958 to 1975 were used to evaluate the effects of calf birth year and month, sex, age of dam, generation and two factor interactions involving sex on the weights at birth (BW), 205 days (WW), 12 months (BW 12), 18 months (BW 18) and 24 months (BW 24). All animals were raised exclusively on pastures.

Calf birth year affected ( $P < 0.01$ ) all traits. A linear decrease over the years was observed for BW, BW 18 and BW 24. However, WW and BW 12 showed a quadratic variation. Birth month was highly significant ( $P < 0.01$ ) for all weights. Calves born in the second semester had lower BW 12 and BW 24 and higher WW and BW 18 than the ones born in the first semester. Age of dam affected ( $P < 0.01$ ) all traits except BW. Cows ranging from 5 to 10 years old weaned heavier calves which maintained the superiority over the subsequent weights. Generation number of calf was significant ( $P < 0.01$ ) for WW, BW 12 and BW 18. It was observed a decrease in all weights from the first to the third generation. Sex was highly significant ( $P < 0.01$ ) for all weights considered. Males were always heavier than females. The difference between sexes increased with age.

The interaction birth year x sex was significant ( $P < 0.01$ ) for all traits except BW. Birth month x sex interaction affected ( $P < 0.05$ ) only the post weaning weights and the age of dam x sex interaction was significant ( $P < 0.05$ ) only for BW 24.