

## REFERÊNCIA:

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## GENETIC AND ENVIRONMENTAL FACTORS RELATED TO THE CALF VIGOR AND MATERNAL QUALITY FOR NELORE BREED

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The fail or delay in the colostrum ingestion by cattle calves increase the risk of death. The success of beef calves in getting colostrum as fast as possible just after birth is dependent of their own- and their mothers behaviour. The variability of the maternal and neonate behaviour of Nelore cattle was evaluated just after birth. The behaviour of each pair (mother and offspring) was recorded by direct observations with instantaneous sampling (with 5 min. sample interval), from birth to the first suckle or until five hours of observation. The following variables were considered: 1) for cows: time in contact with the calf (TCC), time disturbing (TA), and 2) for calves: latency to stand up (LP), latency to suckle (LM) and time between stand up and suckle (LPM). Data from 256 mother-offspring pairs were considered. The statistical analyses were done applying the least square method, through the GLM procedure of SAS statistical package. The heritability estimates were obtained trough restricted maximum likelihood (MTDFREML). Differences between bulls were detected for the variables LP (P<0.05). It was found significance in the following effects: year of birth affecting LP, TCC, TA (P<0.01), class of birth time affecting LP (P<0.05); parity class of the cow, affecting TA (P<0.01) and LP (P<0.05); teats diameter, affecting LPM (P<0.05); the interation between birth weight classes and sex of calf, affecting TCC (P<0.05); and the covariables: TCC, affecting LP, LM and LPM (P<0.01) and LTL (latency to try to stand up) affecting TCC and TA (P<0.01). The heritability estimates were: 0.22 ± 0.14 for TCC; 0.0 ± 0.12 for TA; 0.16 ± 0.17 for LP; 0.09 ± 0.18 for LPM; and 0.13 ± 0.18 for LM, pointing out some genetic base under the behavioural traits analyzed, with exception to the TA, which seems more under parity experience control.