LACK OF THE EXPRESSIVE ASSOCIATIONS BETWEEN TEMPERAMENT, AGGRESSION AND WEIGHT GAIN IN FINISHING WEIGHT FEEDLOT CATTLE.

D.R. Soares¹, K. Schwartzkopf-Genswein², A. C. Sant’anna¹, T. da Silva Valente¹, P. M. Rueda¹, J. N. dos Santos Gonçalves Cyrilo³, and M. J. R. P. da Costa⁴,

¹Sao Paulo State University, Animal Science Postgraduate, Jaboticabal, Sao Paulo, Brazil,
²Agriculture and Agri-Food Canada, Lethbridge Research Centre, Lethbridge, Alberta, Canada,
³Animal Science Institut of Sertãozinho, Sertãozinho, São Paulo, Brazil,
⁴Animal Science Department, Sao Paulo State University, Jaboticabal, Sao Paulo, Brazil.

Key words: behavior, confinement, reactivity

The aim of this study was to determine the relationship between temperament, aggressive behavior and average daily gain (ADG), in feedlot cattle. Behavioral observations were conducted for 10 d (0700 to 1800) using a continuous sampling method. Fifty-three bulls (35 Nelore and 18 Nelore cross with an average age of 30 ± 3 mo.) were observed in one feedlot pen. The frequencies of 2 types of aggressive behavior were recorded: displacement (DISP; physical contact where the initiator pushed with his head, horn or body resulting in a change in the receiver's position) and non-displacement (NDISP; as described above, without any change of the receiver's position). Temperament was assessed, in the pen during weight registers on d 1, d 29 and d 54 at the end of fattening period, using flight distance (FD: proximity (m) to which a stock person could come to an individual animal before it would move away) and flight speed (FS: speed (m/s) at which the animal exited a handling chute). Average daily gain was calculated using animal weights obtained on d 1 and d 54 at the end of the fattening period and Pearson correlation coefficients were estimated for all variables. There were significant positive correlations (P < 0.05) between FD and FS (r = 0.58), DISP and NDISP (r = 0.74) and negative correlations between NDISP and FS (r = −0.29). No correlations (P > 0.05) were observed between NDISP and FD (r = −0.17), DISP and FD (r = −0.06), DISP and FS (r = −0.13), or between ADG and any of the other variables (NDISP: r = 0.07, DISP: r = 0.03, FD: r = 0.09 and FS: r = −0.03). Based on these results we conclude that there is no expressive association between temperament, intra-specific aggression, or ADG.

Financial support: CNPq and ETCO Group.