

## **THEME 9 | RUMINANT NUTRITION AND PRODUCTION**

### **Performance of Canchim steers from different lineages finished on feedlot**

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To meet world demand for food, especially animal protein, it is necessary to select more efficient animals to increase beef meat production. The objective of this study was to evaluate performance of Canchim (composite breed 5/8 Charolais) from different lineages finished in feedlot system. The study was conducted at Embrapa Pecuária Sudeste (Brazilian Agricultural Research Corporation - Southeast Livestock) experimental station located in São Carlos, São Paulo state, in Southeast of Brazil, during the period of September to December 2016. Forty-four Canchim steers at 24 months of age, were separated according to their initial body weight in four pens, in agreement with weight range and according to the lineages; 18 animals belong to the new lineage (NL), 11 to the ancient (AL) and 15 origin of the crossbreeding of the two lineages (CL). The animals were housed in feedlot with collective pens, equipped with drinking trough and automated feed troughs (Growsafe system). The experiment period was between 75 and 91 days. The experimental diet was composed of 15.7% CP and 72.1 TDN and animals were fed ad libitum. Days in feedlot (DF), Initial weight (IW), final weight (FW), daily weight gain (DWG), daily dry matter intake (DMI), feed conversion (FC) and feed efficiency (FE) were evaluated. Performance data on feedlot were analyzed using the SAS's MIXED procedure and mean values were compared using the Tukey test. Treatment (lineages) differences were considered significant at  $P < 0.05$ . For the NL, AL and CL treatments, respectively, the variables days in feedlot (83 d, 86.6 d and 80.3 d), initial body weight (344.2 kg, 325.5 kg and 355.9 kg), daily weight gain (1.9 kg / d, 1.8 kg / d and 2.1 kg / d) daily dry matter intake (11.4 kg / d, 10.8 kg / d and 11.8 kg / d), feed conversion (5.9 kg / kg, 5.9 kg / kg and 5.8 kg / kg) and feed efficiency (17.1% , 17.0% and 17.5%), did not show any difference ( $P > 0.05$ ). In relation to final body weight for the NL, AL and CL treatments (521.4 kg, 504,4 kg and 483.4 kg, respectively), there was difference ( $P < 0.05$ ), with CL being higher, followed by NL and AL. Steers from the crossbreeding of the two lineages of Canchim proved to be superior to the new and ancient lineages at final body weight, but to the variables initial body weight, daily weight gain, daily dry matter intake, feed conversion and feed efficiency, lineages presented the same performance.

**Keywords:** beef cattle, Canchim, feedlot system, lineages, performance, steers

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