

## Effect of sire breed on performance and feed efficiency in feedlot of crossbred cattle<sup>1</sup>

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The aim of this study was to evaluate the effect of sire breed on performance and feed efficiency in feedlot of crossbred cattle. Steers (n=74) and heifers (n=71) produced along two years by breeding Nellore, <sup>1</sup>/<sub>2</sub> Nellore x <sup>1</sup>/<sub>2</sub> Angus and <sup>1</sup>/<sub>2</sub> Nellore x <sup>1</sup>/<sub>2</sub> Caracu cows with Braford (BF), Charbray (CC) and Caracu (CR) sires were raised grazing tropical grasses until 20 months (mo) of age and then finished in feedlot for 4 mo. Animals were kept in individual pens allowing measuring of daily dry matter intake (DMI) during finishing phase in feedlot. Weight records were taken in the beginning (BBW) and in the end (EBW) of the feedlot as well as every 28 days to calculate average daily gain (ADG). Feed conversion rate (FCR) was used as a measure of feed efficiency. Data were analyzed using mixed model methodology. There were no differences for BBW and EBW (P>0.05) among progenies of BF (381 and 556 kg), CC (391 and 567 kg) and CR (387 and 549 kg) sires. For ADG, BF progenies were superior to CR (1.45 vs. 1.31 kg dia<sup>-1</sup>; P<0.05), while CC was intermediate (1.41 kg dia<sup>-1</sup>; P>0.05). Progenies of BF, CC and CR sires did not show any differences for DMI and FCR (P>0.05). All sire breeds present similar feed efficiency in feedlot. Performance in feedlot is affected by sire breed, with Braford and Charbray showing superiority in relation to Caracu.

**Key Words:** composite breed, crossbreeding, feed intake, genetics