

The correlation of residual feed intake on carcass characteristics of Brahman influenced steers

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Residual feed intake is an economic selection criterion for beef producers. Residual feed intake (RFI) is defined as the difference between an animal's actual feed intake and its expected requirements for maintenance and growth. Cattle with low RFI values tend to consume less feed, whereas cattle with high RFI values consume more feed in relation to their maintenance and growth requirements. Research has been conducted to determine the correlation of RFI to carcass characteristics and tenderness for *Bos taurus* cattle. However, in the United States, modest amount of research has been conducted in determining if there is a correlation for *Bos indicus* cattle. The research objective was to evaluate the correlation of RFI on carcass characteristics of Brahman influenced steers (F-1). The hypothesis of this research was that RFI would not significantly correlate to carcass characteristics for F-1 steers. Steers (n = 28) had RFI calculated from intakes prior to entering the finishing period. The average initial body weight (BW) of the finishing period was 390 ± 39.2 kg. The steers were fed for 212 d at a custom feedyard utilizing the standard protocols of the feedyard. The average BW at the end of the finishing period was 731 ± 70.3 kg. Following the finishing period the steers were slaughtered at a commercial abattoir. Carcass characteristics were measured 96 h postmortem. Correlations between RFI and carcass characteristics were determined using the CORR procedure of SAS. Correlations were generally weak (-0.05 to 0.29) with no significance ($P > 0.05$). The results of the study indicate there was no correlation between RFI and carcass characteristics of Brahman influenced steers.