Carcass Evaluation of Curraleiro Pé-Duro Cattle and Their Crosses with Commercial Breeds

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The aim of the study was to assess the quantitative carcass traits of purebred Curraleiro Pé-Duro (CPD), Nellore (NEL) and their crossing cattle. The experiment included 34 animals: seven CPD, six Nellore (NEL), seven F1 (1/2 NEL + 1/2 CPD), seven F2A (1/4 CPD + 1/4 NEL + 1/2 Angus), and seven F2S (1/4 CPD + 1/4 NEL + 1/2 Senepol). All animals were born in 2013, slaughtered in 2017, and were fed exclusively with pasture and mineral supplementation. Animals were slaughtered in a commercial facility located in Timon-MA, northeastern Brazil. Carcasses were quantitatively assessed for following variables: carcass yield (CY), eye muscle area (EMA), subcutaneous fat thickness (SFT), and INDEX. A sample from Longissimus dorsi between the 12th and the 13th rib was collected from each animal. To access EMA, an outline of the muscle was traced in vegetable paper and subsequently expressed as the total area (cm²) with the aid of a planimeter. SFT was measured using a caliper. CY was determined as the ratio of live weight before slaughter to carcass weight expressed in percentage. INDEX was calculated by dividing EMA by carcass weight and multiplying it by 100 to determine the ratio of EMA to 100 kg of carcass. Mean SFT of CPD (0.19±0.12 cm) was similar to that of F1 (0.19±0.09 cm), F2A (0.30±0.10 cm), F2S (0.16±0.08 cm), and NEL (0.15±0.05 cm) breeds (P>0.05), but the mean SFT of the FSA breed was significantly higher than NEL breed (P=0.0376). The CY of the CPD breed (51.76±1.98%) was similar to that of F1 (53.51±1.96%), F2A (53.05±2.58%) and NEL (49.99±1.40%) breeds (P>0.05), but the CY of F2S and F2A breeds was significantly higher than NEL breed (P=0.0099). The INDEX of CPD breed (16.38±2.86) was significantly higher than F2S (11.68±1.33) and F1 (12.29±2.08) breeds and similar to that of NEL (14.00±2.39) and F2A (15.17±2.01) breeds (P=0.0021). In conclusion, the CPD purebred and crossbreed are an alternative for meat production in environments providing low nutritional intake, since it has quantitative carcass traits.

Keywords: beef, carcass, Nellore, local breeds

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