GM 29 Beef sensory evaluation from steers of different genotypes. **Lemes, J.S., Nunes, M.H.G., Ferreira, F.R., Teixeira, B.B.M., Nalério, É.S. and Cardoso*, F.F.** Federal University of Pelotas (UFPEL) Animal Science Graduate Program. Federal University of the Pampa (UNIPAMPA). National Council for Scientific and Technological Development (CNPq). Embrapa Southern Region Animal Husbandry. *fcardoso@cppsul.embrapabr

Evaluación sensorial de carne de novillo de diferentes genotipos

Sensory evaluation is a technique used in the food industry for the development and improvement of products, aiming to find the needs and demands of consumers. The goal of this study was to evaluate the beef quality based on the sensory properties of 61 steers from six different genotypes: Angus (ANAN), Hereford (HHHH), Nelore (NENE), Angus x Nelore (ANNE), Angus X Hereford (ANHH) and Angus X Caracu (ANCR), finished in two different systems: feedlot or pasture. The assessments were done by 12 trained assessors at Embrapa Southern Region Animal Husbandry. The intensity of each attribute (color, flavor, fat intensity, toughness, fibrousness and chewiness) was assessed with *Longissimus dorsi* (LD) muscle samples using a 9 cm scale, being 0 = little intense and 9 = very intense. For the evaluations, LD samples were thawed at 4℃ for 24 hours. Then, samples were wrap ped in foil and grilled until achieve the internal temperature of 75℃. The samples were cut parallel to the fiber muscle into 1.5cm^2 pieces and were offered to the assessors at 60℃ in monadic way. The type III *F* statistics were used to test the fixed effects in the model. When significant, respective least squares means were compared using Tukey-Kramer tests (α=0.05). Significant effects ($p<0.05$) were only observed among the different genotypes and for the toughness, chewiness and fibrousness attributes, all of them related to beef texture. The group ANCR presented lower chewiness values than ANNE and NENE genotypes (Table 1). In addition, the ANCR breed group only showed lower toughness when compared to NENE. On the other hand, the comparisons among ANAN, ANNE and NENE have showed no significant difference ($p>0.05$). The fibrousness attribute has demonstrated higher values for the NENE group when compared to ANCR, ANHH and HHHH. In conclusion, it can be inferred that Caracu breed can be used as an alternative of tropically adapted genotype for crossbreeding with Angus breed, producing more tender beef than when the crossing is done with zebu breeds.

Table 1: Least squares means of sensory toughness, chewiness and fibrousness traits from steers of different genotypes, between parentheses standard errors.

Genotype[*]	Toughness	Chewiness	Fibrousness
ANAN	3.18[abc] (0.48)	4.24[ab] (0.51)	4.77[ab] (0.40)
ANCR	1.87[ab] (0.45)	2.92[a] (0.48)	3.94[a] (0.39)
ANHH	2.25[ab] (0.42)	3.35[ab] (0.45)	4.36[a] (0.38)
ANNE	3.04[bc] (0.46)	4.47[b] (0.49)	4.94[ab] (0.39)
HHHH	2.67[b] (0.45)	3.70[ab] (0.49)	4.42[a] (0.39)
NENE	4.26[c] (0.55)	4.86[b] (0.58)	5.68[b] (0.44)

*ANAN=Angus, ANCR=Angus x Caracu, ANHH, ANHH=Angus x Hereford, ANNE=Angus x Nelore, HHHH=Hereford and NENE=Nelore. Least squares means in the same column followed by the same letter do not differ significantly by the Tukey-Kramer test (p>0.05).

Palabras clave: ganado de carne, cruzamientos, calidad de carne, panel sensorial.
Key words: beef cattle, crossbreeding, meat quality, sensory panel.