Height growth curve parameters of Nellore, Angus x Nellore, Canchim x Nellore and Simmental x Nellore females

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The objective of this study was to estimate the height growth measured on the hip from eight to 90 months of age (t) of females of four genetic groups (GG): Nellore (NEL), Angus x Nellore (AN), Canchim x Nellore (CN) and Simmental x Nellore (SN). The animals were born in two seasons (E: autumn and spring) and were submitted to three levels of supplementation (Treat), depending on the season (0.0 and 3.0 kg of concentrate for animals born in autumn, and 0.0, 1.5 and 3.0 kg of concentrate for animals born in spring). The estimate of height growth, as a function of t, was realized by Brody's non-linear model with parameter A (height at maturity), b (parameter that shaped the curve) and k (rate of growth, t^{-1}). Using the MIXED procedure of SAS, the effects of GG, E, GG x E, and Treat(GG x E) on A, b and k were studied. The effect of GG on A was significant ($P<0.05$), indicating that the genetic groups showed different height at maturity. For the parameters b and k, the effect of Treat(GG x E) was significant ($P<0.05$), suggesting that the effect of Treat depended on GGxE.