# EFFECT OF PARITY ON MILK PRODUCTION OF GRAZING NELLORE FEMALES

30° Zootec, 1ª edição, de 10/05/2021 a 14/05/2021
ISBN dos Anais: 978-65-89908-12-8

**LANA; Daniela Silveria de [1], SIQUEIRA; Isabelle Pinheiro [2], ARANTES; Alice Nasser [3], ALMEIDA; Cléber Daniel [4], FERREIRA; Matheus Fellipe de Lana [5]**

**RESUMO**

In the last BR-Corte edition, the estimated milk production (MP) for Nellore cows during seven months of lactation was based on the experiment developed by Costa e Silva (2015). Although the equation presented the best estimate of MP than the past editions (BR-Corte 2010), none of these experiments evaluated separately the MP of different categories. The objective of the experiment was to evaluate the effect of parity in the milk production of grazing Nellore females during seven months of lactation. Thirty-six pregnant female cows were used, 12 nulliparous, 12 primiparous and 12 multiparous with an average age, body weight and body condition score: 2 years, 442 (±62) kg, 6.20 (±0.5); 3 years, 457 (±58) kg, 5.68 (±0.5); 4-6 years, 505 (±60) kg, 5.92 (±0.5), respectively. Animals were randomly divided into six paddocks, with 2 females from each category. Paddocks were evenly covered with *Urochloa decumbens* grass, with free access to water and feeders. All cows were group-fed with a 35% supplement (1.0 kg/d) for the 60 pre-partum days (gestation period from 230 to 290-d), accompanied by MM offered ad libitum supplied separately in additional feeders. By taking calving day as day 0, milking was performed to estimate milk production on days 7, 14, 21, 42, 63, 91, 119, 154 and 203. Cows were milked using a milking machine twice in a day (6:00h and 18:00h) immediately after an injection of 10 UI of oxytocin in the mammary vein. The produced milk was weighed, obtaining the milk yield in 24 hrs. Statistical evaluations were performed considering 0.05 as the critical level of probability for the occurrence of the type I error. The statistical analyses were carried out using the PROC MIXED of SAS 9.4 (Inst. Inc., Cary, NC, USA). Milk yield was different between categories ($P<0.05$). Nulliparous and primiparous displayed similar MY, 6.5 and 6.3 kg/d, respectively ($P>0.05$), however, multiparous cows had an average of 0.69 kg/d MY greater than nulliparous and primiparous. The persistency of lactation was estimated as -0.008 kg per day, which is the decrease of production after the peak of lactation. Milk lactose had an average of 4.52% and did not differ between categories or day ($P >0.05$). Milk fat did not differ between categories ($P>0.05$); however, effect of day was found, in which increased linearly 0.001% per day ($P <0.05$). Milk protein and total solids were different between categories, being higher for multiparous cows (0.11 and 0.31%, respectively). Effect of day was also found, as increased linearly 0.001 and 0.003 per day, respectively. As our results indicated that multiparous had higher MY than nulliparous and primiparous, different equations to estimate milk yield have to be generated according to parity.

**PALAVRAS-CHAVE**: Nutrição e produção de ruminantes, pasture, milk prodution, Zebu

[1] Graduanda em Zootecnia - UFV, daniela.s.silveira@ufv.br
[2] Graduanda em Zootecnia - UFV, isabelle.siqueira@ufv.br
[3] Graduanda em Zootecnia - UFV, alice.arantes@ufv.br
[4] Graduando em Zootecnia - UFV, cleber.almeida@ufv.br
[5] Doutorando em Zootecnia - UFV, matheus.lana@ufv.br