

THEME 9 | RUMINANT NUTRITION AND PRODUCTION

Milk production of nelore cows under mineral supplementation with virginiamycin as an additive

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The milk production of beef cows has a direct influence on the weight gain of their calves. The use of supplements that can increase milk production of beef cows has been studied in recent years, aiming at higher rates of calf weight gain, and the use of additives may be a viable alternative in the supplementation of beef cows. The aim of the present study was to evaluate the milk yield of Nelore cows, under mineral supplementation with and without virginiamycin. The animals were allocated to four paddocks with a mean area of 17.91 ha, with average dry matter availability of 3895 kg of *Urochloa brizantha* cv. MG5 provided with natural drinking fountains and 3.0 m long covered troughs, maintaining a reserve picket with the same characteristics. A total of 24 cows were randomly selected to be milked from a lot of 100 with their respective calves, with 12 cows from each treatment with age and mean body weight of 66 months and 333.03 ± 4.64 kg, respectively. The experiment was carried out in a completely randomized design. The animals were grouped into four lots, with 25 cows and their respective calves in each group, six of which were milked. To stimulate milk secretion, 2.0 mL of oxytocin was applied to the mammary vein before beginning milking. The cows were distributed into two treatments consisting of the animals supplemented with a mineral mix (MM), control group and; supplemented with MM + virginiamycin (VM). A total of 80 g pair⁻¹, cow and calf (CC), of MM containing 200 mg of VM per animal were given daily to the animals, in the two groups receiving VM, while the other two groups received 80 g pair⁻¹ (CC) of MM, the control group. Cows supplemented with VM presented higher milk yield ($P < 0.10$) when compared to cows in the control group, of 3.47 and 2.94 kg day⁻¹, respectively, and the same result was obtained when adjustments were made for milk production with 4% fat, of 3.67 and 3.06 kg day⁻¹, higher in 19.93%. The other milk components, fat, lactose, protein and dry extract, were not influenced by the use of the additive in the supplements. Thus, supplementation with virginiamycin increases the milk yield of Nelore cows, with virginiamycin being indicated for this animal category.

Keywords: fat, lactating, lactose, protein

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