

THEME 9 | RUMINANT NUTRITION AND PRODUCTION

Productive performance of breeding nelore cows, under mineral supplementation with virginiamycin as an additive

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Protein-energy supplementation of beef cows has been scarcely applied in Brazil. However, the use of ruminant fermentation modulating additives has become a viable alternative in the supplementation of this animal category due to the low inclusion of these additives in the mineral supplements, which require little or no change in trough structure and property management. The aim of the present study was to evaluate the productive performance of Nelore lactating cows under the use of 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. One hundred cows were used with their respective calves, at 66 months old and average body weight of 333.03 ± 4.64 kg. The experiment was carried out as a completely randomized design in four lots, each containing groups of 25 calves and their respective mothers, and 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. No difference was observed between the cows under the two treatments (P > 0.10) for the following variables: final body weight, weight gain and mean daily gain (MDG), with mean values of 374.29 and 377.30 kg, 42.77 and 44.74 kg and 0.32 and 0.34 kg day⁻¹, respectively. Body condition score was higher for cows receiving VM, of 4.90, when compared to control animals, of 4.68. Regarding the primiparous or multiparous category, primiparous animals presented higher values (P < 0.10) for MDG, of 0.44 and 0.26 kg day⁻¹. The gestation rate of the cows was not influenced (P > 0.10) by supplementation with MM and MV, of 75.51 and 72.00%, respectively. Thus, mineral supplementation with the addition virginiamycin is indicated to increase the corporal score of Nelore cows, but without effect on weight gain or pregnancy rate.

Keywords: gestation, supplement, weight gain, young

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