

THEME 9 | RUMINANT NUTRITION AND PRODUCTION

Production performance of nelore calves under mineral supplementation with virginiamycin as an additive

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Supplementation with the use of additives for 3 to 4-month old calves can increase their productive performance, due to alterations that occur in the gastrointestinal tract and the decrease in cow milk production during this period. Thus, the use of supplements becomes necessary to increase weight gain rates. The aim of the present study was to evaluate the productive performance of suckling Nelore calves 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. One hundred suckling calves with age and mean body weight of 2.5 months and 72.42 ± 2.18 kg, respectively, were evaluated. The experiment was carried out as a completely randomized design in four lots, each containing groups of 25 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. A significant difference ($P < 0.10$) was found for the variable final body weight (BWF) and BWF adjusted weaning at 240 days, for calves receiving VM supplementation in relation to supplementation with MM only, with a 16.83 kg day⁻¹ increment. Regarding weight gain (WG) at 199 days and WG adjusted for 240 days, the calves that received MV presented higher WG ($P < 0.10$), of 9.8 and 19.82 kg, respectively when compared to the control group. The mean daily gain (MDG) was 11.92% higher ($P < 0.10$), of 0.69 and 0.62 kg day⁻¹, for the calves receiving VM compared to the control group, respectively. Regarding sex, the males presented higher values ($P < 0.10$) for BWF, BWF adjusted for 240 days, WG and mean gain. The MDG of calves and heifers supplemented with VM was the same presented by calves supplemented or not with VM. Thus, mineral supplementation with the addition of virginiamycin is indicated to increase the productive performance of Nelore calves.

Keywords: Additive, supplement, weight gain

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