



Performance of suckling calves of the Pantaneira breed supplemented with *Moringa oleifera*

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Early weaning in control of the amount of milk given to calves, more supplying of solid foods have been identified as effective practices for reducing feed costs. Corroborating the *Moringa oleifera* is a species that has been highlighting ever more, due to its high nutritional value. The objective of the work was at evaluating the performance of calves Pantaneira breed fed concentrate and hay Moringa, during the breastfeeding period. Were used 10 newborn calves in two treatments and five replications, each experimental unit represented by an animal. The calves were divided according to sex and body weight at birth. The diets tested were: T1: Concentrate (control) and T2: Concentrate more Moringa Hay. Besides the solid diet available in the morning, each animal also received 3.0 liters of milk (10% of body weight), divided into two meals the 5:00 a.m. and 17:00 Hrs. The animals were weighed at the beginning and end of the experiment. Statistical analysis ANOVA was conducted followed by a Tukey's test at 5% probability. Sex was removed from the model by not showing differences. Intakes of total dry matter and body weight were 0.108 (T1) and 0.136 kg/day (T2) ($p > 0.05$), and 0.3 (T1) and 0.4% BW (T2), respectively. The crude protein (CP) intake was 49.71 (T1) and 56.16 g/day (T2), resulting from the sum of the CP of concentrate (44.62) and hay (11.5) ($p > 0.05$). The consumption of neutral detergent fiber (NDF) was also higher in animals fed with moringa (T2), the result of adding fiber concentrate (14.14) plus fiber hay (9.72) a total of 23.88 g/day, and therefore superior to animals that received only the diet control (T1) where the NDF was 15.42 g/day ($p < 0.05$). In the group fed with concentrate (T1), the average weight was 25.1 kg and the end was 49.3 kg, giving an average daily gain of 289.0 g/day and feed conversion of 0.374. For the animals fed moringa (T2), the initial and final weights were 23.7 and 48.1 kg, respectively, with a daily gain 290 g/day, resulting in a feed conversion of 0.469 ($p > 0.05$). The results evidence that despite high nutritional quality of moringa in suckling calves the use of hay did not improve the performance of the animals.

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