The aim of this study was to evaluate the milk production of primiparous cows, Curraleiro breed, fed with diets containing different levels of protein. The animals were kept in rotational grazing conditions in mombaça grass (Panicum maximum) and supplemented with 3 kg of concentrate ration, containing 16, 18, 20 and 22% of crude protein. The concentrate, based on corn meal, soybean meal, starea, mineral salt and calcitic limestone was daily supplied, in two equal portions, just after milking. The experiment started 10 days after calving, and the animals were distributed in a Latin Square Design (4x4), being the diets redistributed to the animals over a period of 14 days, totaling 56 days of evaluation. The cows were manually milked in the mornings and afternoons, subsequent to application of 0.5 mL of oxytocin hormone to aid milk ejection. The calves were weighed before and after feeding, being the milk ingested, added to the milked milk value in order to obtain the total milk production from mammary gland. The data were submitted to variance analysis, Tukey test (p>0.05), and regression analysis through software R. Milk production was not significantly influenced by the different treatments, the general average of milk production was 5.19 kg of milk day⁻¹. In conclusion, protein level does not interfere in the dairy potential of primiparous curraleiras cows.

Keywords: lactation, naturalized breed, pasture supplementation

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