Performance of Morada Nova Sheep Supplemented with Concentrated Ration During Gestation in the Caatinga

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Nutritional restrictions imposed on the matrices during the final gestation period may influence their performance, resulting in less than optimal body condition at calving, and negative consequences for lamb production. Thus, our objective with this work was to evaluate the effect of dietary supplementation during pregnancy on the performance of Morada Nova sheep in native pasture of Caatinga. Thirty-six Morada Nova ewes kept in native pasture of the Caatinga were distributed in four groups under the following supplementation strategies: S1 - 200 g of concentrate in the initial two thirds of gestation; S2 - 200 g throughout the gestation; S3 - 350 g in the initial two thirds; and S4 - 350 g throughout the gestation. The parameters of weight and body condition score at parturition, duration of gestation, type of calving and biological lamb mass produced were evaluated. A completely randomized design was used and the averages obtained were compared by the Tukey test at 5% significance. No effect of the concentrated supplementation on the weight and the body condition score of the ewes at parturition was verified, with mean values of 30.56 kg and 2.15, respectively. The duration of gestation was not influenced by dietary supplementation (P > 0.05). Regarding the type of gestation, there was a higher frequency of twin births as the level of supplementation increased (S1 = 12.50, S2 = 25, S3 = 55.56 and S4 = 77.78%). The highest biological mass was produced by females supplemented with 350 g during pregnancy (P < 0.05), with a mean birth weight of 4.94 kg, evidencing that sheep under a higher level of supplementation during pregnancy produce lambs with greater weight at birth. Maternal supplementation with 350 g during pregnancy positively influences the lambs’ birth weight.

Keywords: fetal programming, maternal nutrition, sheep

Acknowledgments: This study was funded by the Brazilian Agricultural Research Corporation (Embrapa).