

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## MILK PRODUCTION AND COMPOSITION OF SUPPLEMENTED MORADA NOVA SHEEP IN CAATINGA NATIVE PASTURE

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Feed restriction during the gestational phase, especially at the final third, can cause damages to milk production during lactation, as well as lower quality of milk produced. Our objective with this study was to evaluate the effect of the concentrated supplementation during gestation on the production and quality of the milk of sheep raised 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. For the measurement of milk production at 15 days postpartum, the lamb weighing method was used before and after 20 minutes of feeding for three consecutive days. The lambs were kept separated from the ewes for 12 hours and the total milk production in 24 hours was estimated by multiplying the 12 hour production data by two. Concomitantly, milk samples were collected for individual composition analysis. Subsequently, the production of corrected milk for the 6.5% fat content was obtained. A completely randomized design was used and the averages obtained were compared by the Tukey test at 5% significance. Sheep that received supplementation of 350 g during gestation presented higher milk yield when compared to the ewes of the other groups ( $P < 0,05$ ): S4 = 0.351 kg dia<sup>-1</sup>; S3 = 0.200 kg dia<sup>-1</sup>; S1 = 0.159 kg dia<sup>-1</sup>; and S2 = 0.130 kg dia<sup>-1</sup>. The milk composition at 15 days postpartum was directly influenced by the level of supplementation during pregnancy ( $P < 0,05$ ). The fat content was the component which received most influence, with the highest means in sheep that received the supplementation throughout the gestation. The highest averages of protein, defatted dry extract and total solids were obtained in the S4 treatment ( $P < 0,05$ ). Concentrated supplementation with 350 g during pregnancy influences the production and composition of Morada Nova sheep milk in the first 15 days postpartum.

**Keywords:** fetal programming, maternal nutrition, sheep

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