

PRODUCTIVE TRAITS OF SANTA INÊS AND MORADA NOVA EWES MATED WITH DORPER RAMS IN SOUTHEASTERN BRAZIL

CARACTERÍSTICAS DE PRODUTIVIDADE DAS RAÇAS SANTA INÊS E MORADA NOVA CRUZADAS COM REPRODUTORES DORPER NA REGIÃO SUDESTE

ANDRÉ TORRES GERALDO¹, JULIANO ISSAKOWICZ², ANA CLAUDIA KOKI SAMPAIO², RICARDO LOPES DIAS DA COSTA¹, HELDER LOUVANDINI², BRUNO CERNEVIVA FORNAZARI¹, JANAÍNA REGIANE GONSALES¹, MAURO SARTORI BUENO^{1*}

¹ Instituto de Zootecnia - APTA, Nova Odessa, SP, Brazil. * E-mail: msbueno@iz.sp.gov.br

² Escola Superior de Agricultura - USP, Piracicaba, SP, Brazil.

Naturalized Brazilian hair breeds are adapted to tropical climate, however produce lambs for slaughter with lower performance and carcass traits. One way to increase productiveness comprises the use of adapted ewes crossed with specialized meat breeds, exploiting the complementarity between breeds and heterosis for sustainable lamb production. Dorper rams can be used to produce crossbred lambs with better performance traits. The aim of this study was to evaluate the weight at birth and at 30 days of Morada Nova lambs (MN) and Santa Inês (SI) straight breed or Dorper crossbred. The study was carried out at Instituto de Zootecnia, city of Nova Odessa, located in São Paulo State, Brazil. Forty-two adult Santa Inês (SI) ewes with 51.8 ± 7.1 Kg of initial body weight, with 21 mated with SI rams and 21 mated with Dorper (DO) rams and 38 Morada Nova (MN) with 33.1 ± 4.98 with 19 mated with MN and 19 mated with DO rams were used. During pregnancy the ewes were reared on intensive grazing systems with rotational grazing on Aruana grass (*Panicum maximum* cv. Aruana), plus corn silage *ad libitum* and a concentrate mixture (400 g/day) with 16% crude protein and 80% of total digestible nutrient (TDN) on final third of gestation. After lambing, the ewes were kept in collective pens and kept under the same diet used in late pregnancy. The weight at birth as well as at 30 day old were recorded and calculated the percentage of lamb weight in relation of ewe weights. Statistical analyses were performed using SPSS software version 12. Based on data is possible to observe that the SI X DO lambs had the highest birth weight followed by the straight breed SI and MN. At 30 day, the SI lambs had greater live weight than MN lambs. No difference was found for lamb's weights in relation to ewe's weight. We conclude that SI crossbred or straight breed lambs are heavier than MN ones.

Table 1. Birth weight, 30 days weight and proportion of lamb weight in relation to ewes weight

| Variables | SI x SI | SI x DO | MN x MN | MN x DO |
|-----------------------------|--------------------|--------------------|--------------------|--------------------|
| Lamb weight at birth (Kg) | 3.88 ± 0.12^b | 4.38 ± 0.15^a | 2.59 ± 0.09^c | 2.72 ± 0.11^c |
| Lamb weight at 30 days (kg) | 10.20 ± 0.32^a | 10.74 ± 0.77^a | 6.84 ± 0.40^b | 7.95 ± 0.33^b |
| Proportion at birth (%) | 7.02 ± 0.28^a | 7.82 ± 0.27^a | 7.51 ± 0.30^a | 8.13 ± 0.43^a |
| Proportion at 30 days (%) | 19.09 ± 0.71^a | 18.73 ± 1.28^a | 20.54 ± 1.18^a | 22.77 ± 1.37^a |

Means in the same row and within the same variable with different superscripts differ significantly ($P < 0.05$)

Keywords: Brazilian naturalized breed, lambing weight, sheep.