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"Bridging the gap between increasing knowledge and decreasing resources"

## Productive Performance and Parasitic Infection in Native Hair Sheep Mated with Dorper Rams

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## Abstract

The aim of the experiment was to evaluate productive performance and parasitic infection in Morada Nova (MN) and Santa Inês (SI) sheep mated with sires of their own genetic group or Dorper (D) rams. The experiment was carried out at Instituto de Zootecnia, located in São Paulo State, Brazil. 51 MN sheep (live weight:  $33.1 \pm 4.98$  kg) and 52 SI sheep (live weight:  $51.8 \pm 7.07$  kg) were used in a controlled mating system. The sheep were kept in *Panicum maximum* pasture and, in the final third of gestation and lactation they were housed in collective pens and had *ad libitum* access to corn silage and concentrate (400 g/animal/day). During gestation, at parturition and in lactation, the body condition score (BCS) and blood beta-hydroxybutyrate ( $\beta$ -OH) concentration was assessed. The amount of lambs weaned per ewe was calculated. The eggs per gram of feces (EPG), coproculture, Famacha© and hematological evaluations (hematocrit, hemoglobin, plasma protein and fibringen) were carried out. The BCS was lower in MN sheep in all experiment (p < 0.05). The blood ( $\beta$ -OH) concentration was higher at 115 and 130 days of gestation and 20 days postpartum in MN sheep (p < 0.05). The amount of lambs weaned was similar between the crossing MNxD and SIxSI (p > 0.05), but lower than the SIxD (p < 0.05). At final third gestation period all breed increased the EPG and 30 days postpartum the EPG was higher in SI than MN sheep (p < 0.05). The genus Haemonchus was predominante in both breeds followed by *Trichostrongilus*. Famacha<sup>(C)</sup> and hematological evaluation did not differ between breeds (p > 0.05), but fluctuated along the trial. The MN sheep crossed with Dorper rams showed similar productive performance to Santa Ines sheep mated with ram of their own genetic group, however, lower than sheep from SIxD group. No differences were found between breeds for parasitic infection.

Keywords: Crossing, Haemonchus, lambs, Morada Nova, Santa Inês

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