

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL  
**REPLY OF NATURALLY INFECTED SHEEP BY GASTROINTESTINAL NEMATODES IN  
*Brachiaria brizantha* CULTIVARS**

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The aim of this study was evaluating the response of naturally infected sheep by gastrointestinal nematodes, under grazing regime in different *Brachiaria brizantha* cultivars (cvs.). The experiment was carried out at Macaíba Campus of Universidade Federal do Rio Grande do Norte from March 31 to August 31, 2017, characterizing two cycles of intermittent grazing. It was used 48 sheep with no defined racial pattern, and average initial weight of 19.04 kg± 0.96. The experimental design was a randomized block (12 replicates and 2 blocks per cultivar). The treatments were four *Brachiaria brizantha* cvs (Marandu, Xaraés, BRS Piatã and BRS Paiaguás). All animals received 0,5% of live weight supplementation. Weekly, animals were evaluated for egg count per gram of faeces (EPG), coproculture, globular volume (GV), degree of anemia by the FAMACHA<sup>®</sup> method, body condition score and weight (BCS). Animals kept in the different cultivars presented a mean of different EPG ( $P < 0.05$ ) only in the second grazing cycle. Animals on Marandu presented the highest average (1422.2 eggs g<sup>-1</sup>), followed by the animals kept in Paiaguás (977.1 eggs g<sup>-1</sup>), Piatã (817.1 eggs g<sup>-1</sup>) and Xaraés (635.7 eggs g<sup>-1</sup>). Comparing the two grazing cycles, there was difference only in the EPG of animals kept in Marandu grass. *Trichostrongylus* spp. (3.1%), *Strongyloides* spp. (4.5%), *Oesophagostomum* spp. (0.4%) and *Haemonchus* spp., were observed with the highest prevalence (86%) in all cultivars and in both cycles. Regarding the GV, there was difference ( $P < 0.05$ ) only in cycle 1 for animals kept in Piatã (25.96%) and Xaraés (22.51%) swards, and the others presented intermediate values. In relation to the anemia degree, animals were classified in Famacha 1, 2 and 3, in cycle 1, but in cycle 2, more than 50% of them were concentrated in Famacha 1. The weight of the animals kept in the Xaraés sward was the lowest of all ( $P < 0.05$ ) in both cycles (21.79 and 26.91 kg, respectively). The BCS focused on 3 in cycle 1 and 3 and 4 on cycle 2. The Piatã and Xaraés swards promoted lower parasitic loads, however, Marandu and Paiaguás provided better nutritional conditions, and there was no compromise of performance due to the high parasitic load. Thus, *Brachiaria brizantha* cultivars (Marandu, Xaraés, BRS Piatã and BRS Paiaguás) are recommended for sheep production systems.

**Keywords:** helminths, parasitosis, productivity, ruminant, tropical pasture

Promoção e Realização:

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