

Identification of Gastrointestinal Nematodes in Crossbred Goats with Different Levels of Resistance

R. M. Alves Coutinho¹; A. L. Ferreira de Andrade Junior¹; F. Cavalcante Silva¹; C. L. Benvenuti²; L. da Silva Vieira³; L. Giotto Zaros¹

¹Universidade Federal do Rio Grande do Norte – UFRN – Natal, RN, Brazil; ²Universidade Estadual Vale do Acaraú, Sobral, CE, Brazil; ³Embrapa Caprinos e Ovinos, Sobral, CE, Brazil

The aim of this study was to identify the species of nematodes from abomasum and small intestine of F2 crossbred goats (½Anglo-Nubian x ½ Saanen) naturally infected. Sixty young goats were kept together on pasture without anthelmintic treatment for 4 months. Based on the average of eggs per gram counts, twelve animals that presented the lowest EPG were classified as resistant and twelve animals that presented the highest EPG were classified as susceptible and slaughtered for recovery, identification and quantification of the species present in the abomasum and small intestine. The classification was based on morphological characters according to Ueno and Gonçalves method, including the length of the nematodes, length of the spicules of the males and the type of ovoider and length of females in both groups and submitted to Analysis of Variance using Statistical Analysis System. The number of parasites was lower in goats classified as resistant compared to that classified as susceptible (758.5 and 3653.5, respectively; $P < 0.05$). All parasites from abomasums were identified as *Haemonchus contortus*, with average length of females of 14.4mm (± 4.3 mm) and 16.3mm (± 3.5 mm), males 11.6mm (± 2.9 mm) and 12.4mm (± 2.2 mm), length of spicules of 410 μm ($\pm 28\mu\text{m}$) and 435 μm ($\pm 21\mu\text{m}$) and length of ovoider 471 μm ($\pm 83\mu\text{m}$) and 463 μm ($\pm 89\mu\text{m}$), to resistant and susceptible groups, respectively. In *H. contortus* females of resistant and susceptible groups, the predominant type of vulvar process was linguiform (47.56% and 49.33%, respectively). In the small intestine form resistant and susceptible animals *Trichostrongylus colubriformis* was identified, with average length of parasitic females of 6.87mm (± 0.71 mm) and 7.19mm (± 0.76 mm), males of 5.39mm (± 0.6 mm) and 6.55mm (± 0.7 mm), length of spicules of 147.9 μm ($\pm 12.1\mu\text{m}$) and 158.1 μm ($\pm 12\mu\text{m}$) and length of ovoider of 469.3 μm ($\pm 49\mu\text{m}$) and 464 μm ($\pm 48 \mu\text{m}$). It can be concluded that the infection caused by gastrointestinal nematodes in crossbred goats with different degrees of resistance was mixed, characterized by *Haemonchus contortus* and *Trichostrongylus colubriformis*. Study funded by CAPES, CNPq and Embrapa Caprinos e Ovinos.
