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58 United States Department of Agriculture National Animal Health Monitoring System Goat 2019 study: Distribution of gastrointestinal nematodes.

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Abstract: One objective of the United States Department of Agriculture National Animal Health Monitoring System Goat 2019 study was to describe practices producers use to control gastrointestinal nematodes (GIN) and reduce anthelmintic resistance through the examination of anthelmintic treatment efficacy via fecal egg count reduction tests and fecal cultures. The fecal cultures were used to determine what GIN were present across the areas of the US included in the study (September 2019-April 2020). Bulk cultures were processed from 318 operations in 24 states and results were consolidated into 4 regions: Northwest (3 states, 34 operations), Northeast (9 states, 89 operations), Southeast (9 states, 132 operations) and Southwest (3 states, 63 operations). GIN identification included *Haemonchus*, *Trichostrongylus*, *Teladorsagia*, *Oesophagostomum* and *Nematodirus*. In addition to GIN, lungworm presence was also noted. *Haemonchus* were found on 18.6% of the operations (Northwest, 27.0%; Northeast, 13.1%; Southeast, 15.9% and Southwest, 29.2%). *Trichostrongylus* were found on 97.2% of the operations (Northwest, 100%; Northeast, 98%; Southeast, 97.0% and Southwest, 95.7%). *Teladorsagia* were found on 80.3% of the operations (Northwest, 97.1%; Northeast, 71.6%; Southeast, 88.6% and Southwest (75.7%). *Oesophagostomum* were found on 38.2% of the operations (Northwest, 73.1%; Northeast, 39.6%, Southeast, 46.4% and Southwest, 15.5%). *Nematodirus* were found on 7% of the operations (Northwest, 7%; Northeast, 5.2%, Southeast, 20.8% and Southwest, 0%). Lungworms were found on 35.4% of the operations (Northwest, 69.1%; Northeast, 52.2%, Southeast, 33.4% and Southwest, 8.3%). Due to sampling logistics, fecal collection was conducted during autumn through early spring which may have influenced number of more pathogenic GIN. This study provided valuable insight into regional prevalence of GIN in goats. In depth analyses continues and will be forthcoming.

Keywords: distribution, gastrointestinal nematodes, goats