Gastrointestinal parasites in Danish goats - prevalence and risk factors

The aims were to examine prevalence of gastrointestinal parasites in Danish goats, based on faecal examination, in relation to geographical distribution and risk factors, and to investigate the occurrence of anthelmintic resistance in nematodes in selected farms. In April 2012 all Danish goat farms with ≥10 female goats (N=132) according to the Central Husbandry Register, were invited to participate. Of these, 25 herds each submitted faecal samples, collected approximately 1 month after turn out, from 4-12 kids born earlier the same year. During May-July, a total of 232 samples were examined using a modified McMaster technique (sensitivity 5 eggs per gr. of faeces (EPG)). From each herd, samples with EPG>500 were pooled and stained with peanut agglutinin (PNA) for detection of Haemonchus contortus. An egg hatch assay (EHA) for detection of anthelmintic resistance was performed on samples with EPG>300, and herds with a mean EPG>150 were offered a faecal egg count reduction test (FECRT). All herds were asked to complete a questionnaire about management and risk factors concerning parasites, particularly nematodes. Faecal egg counts were generally low; 2 out of 25 herds had a mean EPG>150. Herd prevalence of Nematodirus battus was 16%; likewise PNA-staining revealed H. contortus in 16% of the herds (4 of 5 herds with individual EPG > 500). The overall prevalence of parasites detected by faecal examination were: Eimeria spp.100%, gastrointestinal trichostrongyles (excl. Nematodirus spp.) 66%, Trichuris ovis 36%, Nematodirus spp. (excl. N. battus) 14%, Strongyloides papillosus 14%, Capillaria longipes 7%, Moniezia expansa 5%, N. battus 4% and Skrabinema ovis 3%. In addition, larvae of Muellerius capillaris and Protostrongylus rufescens were observed in a few samples. Analysis of questionnaire data, EHA and FECRT are ongoing.

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