



Data of “Targeted selective Treatment” based on live weigh gain should be used for breeding for resistance against gastrointestinal nematodes

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Abstract:

The development of the FAMACHA© system (VAN WYK u. BATH, 2002) was a milestone in the use of Targeted Selective Treatment (TST). The transfer for non-hematophagic endoparasite populations remains a challenge (KENYON U. JACKSON, 2012). In a study on adapting Targeted Selective Treatment (TST) to a farm with non-hematophagic endoparasite populations daily weight gain was used as parameter for treatment of individual lambs within a group of 76 bleackheaded mouton lambs. Lambs who did not achieve the target weight were treated with ivermectine (2 mg/kg body weigh). Target weights were evaluated in the grazing season before in the same flock on the same pastures. Individual samples for faecal egg count were taken every four weeks. By reaching 45 kg b. wt. ram lambs were slaughtered and the gut examined for gastrointestinal nematodes (GIN). Compared to a regular deworming every four weeks the number of deworming was reduced by 66.9% in male lambs and 76.6% in female lambs respectively. High rates of not treated lambs turned out. In total 36 lambs (18 = 41.9% female + 18=47.4% male) remained untreated over the whole grazing season and achieved the target weights. Clinical endoparasitosis was not present. Positive effects of some lamb’s treatment on gastrointestinal nematodes (GIN) on FEC in the feces of untreated lambs were observed (NOLTE, 2019). The comparison with the two previous years (TRAPP, 2013, SCHÖWERLING, 2016) showed a high variability in GIN populations in the gut of the slaughter lambs. Lambs who need no anthelmintic treatment over the entire grazing season, but meet the target weight gain, should be selected as replacements. By using this as a selection criterion for breeding, an indirect selection for resistance against GIN could be achieved.

References:

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