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To dock or not to dock? Faecal soiling measurement in sheep

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Abstract

Faecal soiling is one of the welfare indicators in the AWIN welfare assessment protocol for sheep (Ovis aries) and is measured by dag scores. Studies on dag scoring for ewes with docked and undocked tails have given rise to contradictory results. The aim of this study was to compare faecal soiling between ewes with docked and undocked tails and evaluate inter-rater reliability for faecal soiling of ewes. This study was conducted on a farm in Southern Brazil and included 66 undocked and 94 docked ewes. Dag score was recorded by three assessors on a scale of 1 to 5. There was no significant difference on faecal soiling for docked compared to undocked ewes and the median dag score was 3 (1–5). Repeatability amongst assessors by intra-class correlation coefficient of dag scores on docked and undocked ewes was 0.49 and 0.40, respectively; however, these repeatabilities showed no significant differences. The modest repeatability between three assessors on dag scoring indicates caution as regards the use of faecal soiling as an indicator and suggests a need for further studies. The best field results may be obtained by increasing the assessment sample to at least 160 ewes or by raising the number of assessors to five to promote better inter-observer repeatability. Results suggest that tail-docking did not promote cleanliness on the breech area. Considering the negative impact on welfare, it seems reasonable to reverse the burden of proof and desist from recommending tail-docking in the absence of clear scientific evidence of any benefit.

Keywords: animal welfare, dag, faecal soiling, intra-class correlation coefficient, inter-observer reliability, sheep welfare indicator