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Evaluation of the Danish surveillance of footpad lesions in organic and conventional broilers

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BACKGROUND
Footpad dermatitis (FPD) as an indicator of on-farm broiler welfare —— Danish official surveillance system since 2002 with payment and enforcement implications. As originally developed for conventional broilers, the usability for organic broilers has not yet been investigated

OBJECTIVES
Evaluation of performance of the official Danish FPD surveillance system with respect to potential sources of misclassification and the effect of the sampling strategy in both organic and conventional broiler feet

MATERIALS & METHODS
Comparison of official FPD scores of 1,799 broiler feet (~100 per flock, from 9 organic and 9 conventional flocks) and scores by a laboratory reference method, based on predefined visual and invasive scoring criteria derived from the official system

RESULTS
Wide range of severity

Differences between organic and conventional broiler feet
• Shape, colour and skin quality —— less characteristic lesions in organic feet
• Higher degree of hyperkeratosis and hypertrophy of papillae in organic feet
An association between lesion size and depth was observed

Marked differences between official and laboratory scores
• Disagreement highly restricted to scores 1 and 2 —— evidence of underestimation of lesion severity in organic and conventional feet
• Disagreement more pronounced in organic feet compared to conventional, which was attributed to the organic lesions being more difficult to score

Evidence of some degree of selection bias, especially in flocks with middle range flock scores, possibly due to insufficient randomisation

Focus for future improvements to FPD surveillance systems

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