## AWN-OP-01

TITLE

TAIL BITES IN FREE-RANGE BASED FINISHER PIG SYSTEMS – PREVALENCE AND RISK FACTORS.

Hanne Kongsted<sup>1</sup>, Leslie Foldager<sup>1,2</sup>, Jan Tind Sorensen<sup>1</sup>

<sup>1</sup> Department of Animal Science, Aarhus University

<sup>2</sup> Bioinformatics Research Centre, Aarhus University

## CONTENT

Background and Objectives

Free-range pig productions systems offer low stocking densities and access to open air, straw and rooting materials. Nevertheless, in some free-range finisher pig herds (where tail docking is prohibited), tail biting is a serious problem. The study aimed to identify housing and management related risk factors in both the weaning and the growing period associated with tail bites.

Materials and methods

Thirteen free-range finisher herds (7 organic and 6 conventional) supplied with weaners from six sow herds were visited during cold periods in 2017-18. Owners in supplier and finisher herds were interviewed about management routines. Pen-related risk factors were registered and pigs at 20-50 kg were examined for light and severe tail lesions. Risk factors were evaluated in univariable logistic models including pen-ID as random effect. Results

84% of the examined conventional pigs and 93% of organic pigs had intact tails. Severe lesions were seen in 3% of organic and 10% of conventional pigs. Conventional production system (OR: 9.9, 95% CI: [1.4; 68.8], P= 0.02), high stocking density at weaning (OR: 0.44 per 0.1 m2/ pig, 95% CI: [0.28; 0.7], P< 0.001) and feeding space at weaning (OR: 19.1 per 2 cm less space/ pig, 95% CI: [3.4; 108.2], P< 0.001) were pointed out as significant risk factors for tail lesions.

Discussion and Conclusion

The study showed that tail lesions were low-prevalent in the early rearing phase of free-range pigs. However, since we saw associations between weaning environment and tail lesions it seems evident, that management conditions in this phase of life matter. The study emphasized the importance of a low stocking density - even in systems with a markedly lower density than traditional indoor systems. We suggest to further scrutinize the background of conventional systems constituting a risk factor for tail biting.