

**TITLE**

**EFFECT OF POSITIVE HANDLING OF SOWS ON LITTER PERFORMANCE AND PRE-WEANING MORTALITY**

Dimitri De Meyer<sup>1</sup>, Arthi Amalraj<sup>2</sup>, Tommy Van Limbergen<sup>2</sup>, Ilias Chantziaras<sup>3</sup>, Martin Fockede<sup>1</sup>, Ilias Kyriazakis<sup>4</sup>, Dominiek Maes<sup>3</sup>

<sup>1</sup> *Vedanko BVBA Keukelstraat 66a, 8750 Wingene, Belgium*

<sup>2</sup> *Unit of Porcine Health Management, Faculty of Veterinary medicine, Ghent University, Belgium*

<sup>3</sup> *Ghent University, Faculty of Veterinary medicine, Porcine Health Management Unit*

<sup>4</sup> *Agriculture, school of natural and environmental sciences, Newcastle University*

**CONTENT**

Background and Objectives:

Stress around parturition, such as fear of humans, may affect maternal behavior in pigs, increase farrowing duration and increase piglet mortality. This study investigated the effect of positive handling of sows (scratching, music) in the farrowing room on litter performance and pre-weaning piglet mortality.

Materials and Methods:

The study was conducted in a sow herd (n=560 PIC sows) that practiced a 2-week batch farrowing system. The sows were moved to the farrowing unit one week before farrowing. Lactating sows received commercial feed and were housed in conventional farrowing crates. Ten successive farrowing batches were included: three (n=140 sows; av. parity 3.13) were treated (T), seven (n=314; av. parity 3.27) served as controls (C). In the T batches, backscratching of the sows was done daily for 15 seconds per sow from entry into the farrowing unit until farrowing, and music (commercial radio station) was played from 6.00 am until 6.00 pm from entry into the farrowing unit until weaning (21 days). Litter performance and piglet mortality were recorded, and data were analyzed statistically using ANOVA or logistic regression.

Results:

The performance in the T and C groups, respectively, were: total piglets born (13.87 vs. 14.37), born alive (13.30 vs. 13.74), stillborn (4.27 vs. 4.67), mummified (0.23 vs. 0.39) and pigs weaned per sow (12.00 vs. 12.17) (P>0.05). Pre-weaning mortality was 9.83 vs. 11.91% in the T and C group, respectively (P<0.05).

Conclusions:

Under the present conditions, there were no significant effects on litter performance, but the preweaning mortality was significantly lower in the treated batches. Further research is warranted to confirm the present results and to assess the separate effects of different handling methods.