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## EVALUATION OF SOWS' AND PIGLETS' PERFORMANCE IN FARROWING PENS WITHOUT FIXATION

T. Nicolaisen, M. Fels, N. Kemper.

*Institute for Animal Hygiene, Animal Welfare and Farm Animal Behaviour, University of Veterinary Medicine Hannover (Foundation), Hannover, Germany.*

### Introduction

Conventional pens with farrowing crates (FC) restrict lactating sows in various behavior patterns, and its acceptance declines in society. Therefore, alternative systems without any fixation of the sow during lactation -single loose housing pens (LH) and a group-housing system for six lactating sows (GH) - were compared to the FC system with regard to performance data of sows and piglets. Moreover the proportion of cross suckling in the GH system was assessed.

### Materials & Methods

From 156 sows and 2,338 piglets in nine batches, weaning weights of the piglets, average losses and causes of piglet losses were analyzed.

Cross suckling was analyzed via direct observation on three sampling periods per batch in four batches. Following parameters were assessed: number of cross suckling piglets, location, synchronization and success/failure of each suckling bout.

### Results

The highest losses were observed in the LH with 25.7%, followed by the GH with 19.9% and the FC with 12.3%. The main reason for the increased losses was a higher proportion of crushed piglets. LH piglets reached the highest mean weaning weight (8.2 kg), followed by the FC piglets (7.5 kg) and the GH piglets (6.9 kg).

In total, 393 suckling bouts were observed in the LH system. About 90% (n=354) of the suckling bouts were successful. Cross suckling occurred in 35% of all successful suckling bouts. The average number of cross suckling piglets per successful nursing was 0.56. Initially, for nursing, the pens were preferred, whereas in the following two examinations more suckling bouts took place in the communal area. The grade of nursing synchronization was high with two thirds of all suckling bouts in groups of four to six sows.

### Discussion & Conclusion

Further research is necessary to develop the two tested alternative farrowing systems into a marketable commodity.

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