

Effects of a perforated lying area on animal and floor cleanliness in pens for fattening pigs

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Key words

Fattening pig, floor, perforation, lying area, cleanliness, eliminative behaviour

Aim of the study

In Switzerland, fully slatted floors for pigs will be banned after 1st September 2018. In pens for fattening pigs that existed before 1st September 2008, a partly slatted floor with a lying area characterised by a perforation of 5% for the drainage of liquids can be installed. The aim of the present study was to test whether a lying area with minimal perforation is suitable for the drainage of liquids. To do so, animal and floor cleanliness were measured in pens for fattening pigs on four farms.

Material and methods

Seven different floor types characterised by a perforation ranging from 5% to 10% (concrete with 5%, 6%, 6.4% and 8% perforation; rubber mats with 5% and 10% perforation; Click-In with 5% perforation) were included in the study and compared to fully slatted floors. The study was carried out on 4 farms with different feeding systems (industrial waste, feeding of away). On a given farm, all floor types were installed simultaneously in one pen each. The study lasted one year. Data on animal and floor cleanliness were collected four times in each batch by a collaborator of ART. In addition, the farmers collected data on animal and floor cleanliness twice a week.

Results and significance

The results of the investigation showed that both floor and animal cleanliness was best in pens with a fully slatted floor and pens with a rubber mat with 10% perforation installed in the lying area. Cleanliness was not only influenced by floor type but also by temperature. With all floor types, cleanliness was worse at lower (data collected by farmers) or medium temperatures (data collected by collaborator of ART). In contrast, pigs were less soiled at lower temperatures (data collected by farmers) and most soiled at medium temperatures (data collected by collaborator of ART). On an absolute level, however, all floors were only little soiled. Most data were in the range of "clean" and "dry with dry parts of faeces" (data collected by farmers) and "less than 50% soiled" (data collected by collaborator of ART). Similar results were found regarding animal cleanliness. Most pigs were categorized as "little soiled" and very few pigs as "heavy soiled".

It was concluded that floors characterised by a perforation of 5% are suitable for the use in the lying area of pens for fattening pigs.

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