

Effects of rubber mats in the lying area on claw health of fattening pigs

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Key words

Pig, quality of the lying area, claw health, floor, rubber mat

Aim of the study

The subject of this study was to investigate differences in claw and leg health of fattening pigs kept in pens provided with either rubber mats or concrete elements in the lying area. In addition, differences in claw and leg health between floors differing in the percentage of perforation were examined.

Material and methods

The study was carried out with a total of 230 fattening pigs during four batches. The animals were assigned to six pens differing in the quality of the lying area and with space allowances according to the Swiss Animal Protection Ordinance. The lying area of three pens each was equipped with rubber mats and concrete elements. For a given floor quality, the lying area of one pen each was either unperforated or had a perforation of 5 % or 10 %. All pigs were judged clinically for claw and limb lesions before being moved into the experimental pen as well as 6 and 12 weeks later.

Results and significance

The material of the lying surface (rubber or concrete) had an impact on the prevalence of heel erosions on the medial hind claws and longitudinal cracks on the lateral rear claws. These findings had a lower prevalence on rubber mats than on concrete elements. Moreover, prevalence of bursae on the hind legs was lower in animals on rubber mats. Compared to unperforated floors, prevalence for wall hemorrhages was higher in the hind medial claw position on floors with a perforation percentage of either 5 % or 10 %. The time the animals had spent in the housing system had an influence on the occurrence of most types of claw lesions. Prevalence of vertical cracks increased from the first to the third assessment. In contrast to all other lesion types, prevalence of hyperkeratosis was already high at the first assessment on the front legs, but not on the hind legs. In both leg positions, this prevalence increased to the second and further on to the third assessment. Prevalence of bursae on the hind legs increased over the three assessments and was substantially higher than that on the front legs.

Publications, posters and presentations

Anna Falke, Xaver Sidler, Beat Wechsler, Roland Weber (2015): Einfluss gummierter Liegeflächen auf die Klauen- und Gliedmassengesundheit von Mastschweinen. Poster an der 47. Internationalen Tagung Angewandte Ethologie vom 19. bis 21. November 2015 in Freiburg i. Br.

Anna Falke, Xaver Sidler, Beat Wechsler, Katharina Friedli, Roland Weber (2015): Effects of rubber mats in the lying area on claw health and joint alterations of fattening pigs. Manuscript for Journal of Animal Science (in preparation).

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