Behavior of pregnant sows under different types of housing in the summer

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Pregnancy cages are used throughout the world, although their use is being gradually phased out by some countries because of concerns about well-being. The European Union has ordered a total ban on gestation cages in 2013, a ban applicable after the fourth week of gestation. Swine matrices that are in environments with a low level of well-being, possibly, will have the productive and reproductive potential reduced. In the context of the science of animal welfare, confinement of swine matrices is a much-discussed topic, due to the fact that the vast majority of these animals are kept in cages during gestation. Thus, the use of cages starts to be questioned due to the manifestation of the chronic stress of the animals, due to the deprivation of physical exercises and the expression of abnormal behaviors. This experiment was conducted in order to study the behavior of pregnant sows subjected to different types of housing in the summer. The sows were distributed in a completely randomized design with four treatments and twelve replicates, totaling 48 pregnant matrices. The diet used was based on corn and soybean meal, supplemented and formulated according to the nutritional requirements of the swine matrices. The treatments were the following: gestation stalls, group gestation pens with feeders; group gestation pens without feeders and group gestation pens with paddocks and no feeders. The study evaluated serum cortisol and fecal cortisol metabolites. The environmental variables were above the comfort zone for the gestation period. There were significant differences (p< 0,05) among treatments for mean serum cortisol in the gestation period, with lower levels in sows housed in group pens. There were significant differences (p< 0,05) among treatments for mean fecal cortisol metabolites in the gestation period, with the lowest levels found in sows housed in group gestation pens without feeders and sows housed in group gestation pens with paddocks and no feeders. It can be concluded that group gestation pens provided better sow welfare when compared to gestation stalls. However, group gestation stalls with paddocks reduced stereotypies of sows compared to other types of housing.
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