

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

PERFORMANCE OF LACTATING PIGLETS INFLUENCED BY THE THERMAL ENVIRONMENT

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Currently, in the swine production, besides the nutritional and handling standards in the initial phase, the rearing environment must be considered, aiming to achieve a comfort condition for both categories: lactating piglets and sows. Based on this information the aim of this work was to evaluate the effects of thermal environment under performance of lactating piglets reared in a semi-confined system of the Instituto Federal de Brasília, *campus* Planaltina-DF. Data related to daily weight gain, surface temperature from the neck, palette and shank, rectal temperature of the piglets were measured. Also, the maximum and minimum air temperatures of the pen and the creep during 21 days, measured in three periods of the days: 8 AM, at midday and 4 PM. The temperatures were measured using an infrared thermometer, a clinical thermometer and a hygrometer, respectively for surface, rectal and air temperatures. An analysis of variance was performed by the least square method using the “Statistical Analysis System” software. The maximum air temperatures inside the creep were not constant during the trial (mean value of 23.2°C) and it was not possible to achieve a comfort condition for the piglets, considering an ideal temperature ranging between 29 and 31°C. On the other hand the mean maximum air temperature of the pen was 27.7°C, too high in comparison with the comfort temperature for sows (between 12 and 16°C) and higher than the upper critical temperature (23°C). These results show inadequate temperatures for both categories evaluated. Therefore, air temperature influenced the body weight gain of the piglets and it was related to fluctuations on rectal and surface temperatures of the piglets, being an indicative that climatization systems are necessary to attend thermal requirements of sows and piglets to not cause performance decrease.

Keywords: Ambience, piglets, temperature, thermal stress

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