Productive Performance of Lactating Sows Feed with Cull Chickpea

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Abstract : This research was carried out with the objective of knowing the productive performance of sows in lactation when fed with diets containing cull chickpea instead of corn and soybean meal. Thirty-six (Landrace x Yorkshire) lactating sows were divided into three treatments with 12 sows per treatment. On day 107 of gestation, sows were moved into farrowing crates in an environmentally regulated $(2.2 \times 0.6 \text{ m})$ contained an area $(2.2 \times 0.5 \text{ m})$ for newborn pigs on each side, all diets were provided as a dry powder, and the sows received free access to water throughout the experimental period. After farrowing, daily feed allowance increased gradually, and sows had ad libitum access to feed by day four. They were fed diets containing 0 (CONT), cull chickpeas 15 % (CHP15), or cull chickpeas 30% (CHP30) for 28 days. The diets contained the same calculated levels of crude protein and metabolizable energy, and contained vitamins and minerals that exceeded the National Research Council (1998) recommendations; sows were fed three times daily. On day 28, piglets were weaned and performances of lactating sows and nursery piglets were recorded. All data in this experiment were analyzed in accordance with a completely randomized design. Results indicated that average daily feed intake (5.61, 5.59 and 5.46 kg for CONT, CHP15, and CHP30 respectively) of sows were not affected (P > 0.05) by different dietary. There was no difference (P > 0.05) in average body weight of piglets on the day of birth (1.35 vs. 1.30, and 1.32 kg) and day 28 (7.10, 6.80 and 6.92 kg) between treatments. The numbers of weaned piglets (10.65 on average) were not affected by treatments. It is concluded that the use of cull chickpea at 30% of the diet does not affect the productive performance of lactating sows.

Keywords: cull chickpea, lactating sow, performance, pigs

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