

The effect of herbal extracts on the productivity of sows during pregnancy and lactation

Summary

The objective of this study was to investigate the effects of a plant extract mixture (XT) standardized in 5.4% carvacrol (oregano), 3.2% cinnamaldehyde (cinnamon), and 2.2% capsicum oleoresin (Mexican pepper) on the performance of piglets and sows when used as a supplement in the diet of sows. An experiment was performed on 40 sows, divided into two groups of 20 (control and experimental). From d 90 of pregnancy until weaning (day 28), the sows of the control group were fed a basal diet, while the sows in the experimental group (XT) received the basal diet supplemented with the plant extract mixture (100 mg/kg). Backfat thickness in the sows (at points P2 and P4) was measured on day 90 of pregnancy and at weaning. Milk samples were collected from each sow on d 15±2 of lactation. The sows that received diets with plant extracts had greater backfat thickness at weaning (at points P2 – $P \leq 0.01$; P4 – $P \leq 0.05$), lower ($P \leq 0.01$) losses of backfat during lactation, and higher ($P \leq 0.01$) milk lactose content than the control sows. Piglets of sows whose diet was supplemented with the plant extracts had higher ($P \leq 0.05$) average daily weight gain during the suckling period and higher ($P \leq 0.05$) body weight at weaning. Mortality of piglets from experimental sows during the suckling period was lower ($P \leq 0.05$) than for the control sows. The results showed that plant extracts used to supplement the diet of sows during lactation had a beneficial effect on the performance of the sows and their piglets.

KEY WORDS: plant extracts, sows, piglets, lactation