The aim of the present study was to evaluate the importance of flavor exposure during gestation and lactation on piglet performance after weaning. The effect of Fluidarom 1003 inclusion (375 g/Tm; 15% of anise as active ingredient) on piglet performance after weaning was studied following a 2 × 2 factorial arrangement were the main factors were the inclusion of Fluidarom 1003 to the sows diet or the postweaning diets. A total of 80 crossbred sows were offered Fluidarom 1003 flavored (F, n = 40) or control (C, n = 40) feed during last 42 d of gestation and the entire lactation (28 d). Creep-feed (F or C) was offered to each litter according to the sow treatment. After weaning, a total of 480 piglets were offered F or C feed for 35 d, resulting in FF, CF, FC and CC piglets (n = 12). Litters were standardized in number and weight by cross fostering within each treatment. Sow and litter performance was controlled until weaning. After weaning, piglets were distributed into blocks according to initial BW, and feed intake and BW of piglets was weekly monitored to calculate ADFI, ADG and feed to gain ratio (FGR). Performance data was analyzed with ANOVA by using the GLM procedure of SAS taking into account pre- and postweaning exposure. A total of 80 crossbred sows were offered Fluidarom 1003 flavored (F, n = 40) or control (C, n = 40) feed during last 42 d of gestation and the entire lactation (28 d). Creep-feed (F or C) was offered to each litter according to the sow treatment. After weaning, a total of 480 piglets were offered F or C feed for 35 d, resulting in FF, CF, FC and CC piglets (n = 12). Litters were standardized in number and weight by cross fostering within each treatment. Sow and litter performance was controlled until weaning. After weaning, piglets were distributed into blocks according to initial BW, and feed intake and BW of piglets was weekly monitored to calculate ADFI, ADG and feed to gain ratio (FGR). Performance data was analyzed with ANOVA by using the GLM procedure of SAS taking into account pre- and postweaning exposure. A total of 80 crossbred sows were offered Fluidarom 1003 flavored (F, n = 40) or control (C, n = 40) feed during last 42 d of gestation and the entire lactation (28 d). Creep-feed (F or C) was offered to each litter according to the sow treatment. After weaning, a total of 480 piglets were offered F or C feed for 35 d, resulting in FF, CF, FC and CC piglets (n = 12). Litters were standardized in number and weight by cross fostering within each treatment. Sow and litter performance was controlled until weaning. After weaning, piglets were distributed into blocks according to initial BW, and feed intake and BW of piglets was weekly monitored to calculate ADFI, ADG and feed to gain ratio (FGR). Performance data was analyzed with ANOVA by using the GLM procedure of SAS taking into account pre- and postweaning exposure. A total of 80 crossbred sows were offered Fluidarom 1003 flavored (F, n = 40) or control (C, n = 40) feed during last 42 d of gestation and the entire lactation (28 d). Creep-feed (F or C) was offered to each litter according to the sow treatment. After weaning, a total of 480 piglets were offered F or C feed for 35 d, resulting in FF, CF, FC and CC piglets (n = 12). Litters were standardized in number and weight by cross fostering within each treatment. Sow and litter performance was controlled until weaning. After weaning, piglets were distributed into blocks according to initial BW, and feed intake and BW of piglets was weekly monitored to calculate ADFI, ADG and feed to gain ratio (FGR). Performance data was analyzed with ANOVA by using the GLM procedure of SAS taking into account pre- and postweaning exposure.
Effect of dietary propolis supplementation on growth performance, blood profiles, relative organ weight, and meat quality in broilers. H. L. Li*, H. C. Jang, and I. H. Kim, Department of Animal Resource & Science, Dankook University, Cheonan, Choongnam, South Korea.

The objective of the current study was to evaluate the effects of dietary propolis on growth performance, blood profiles, relative organ weight and meat quality in broilers. A total of 720, 1-d-old male ROSS 308 broiler chicks (BW = 40.1 ± 0.1 g) were randomly allocated to 1 of 5 dietary treatments (9 pens with 16 broilers per pen). Dietary treatments were (1) NC, negative control diet; (2) PC, NC + 0.01% avilamycin; (3) PRO1, NC + 0.05% propolis; (4) PRO2, NC + 0.10% propolis; (5) PRO3, NC + 0.20% propolis. The broilers were weighed and feed intake was recorded by pen on d 0, 14, and 28 to calculate growth performance. At the end of the experiment, 27 broilers were randomly selected from each treatment (3 birds per pen) and blood samples were collected for measuring white blood cells, red blood cells, lymphocyte and immunoglobulin G concentration. After blood collection, the same broilers were weighed individually and slaughtered for the measurement of relative organ weight and meat quality. Birds fed PRO2 diet had a higher (P < 0.05) body weight gain (1 to 2 wk, 392 vs. 372 g; 1 to 4 wk, 1481 vs. 1430 g) and a lower (P < 0.05) feed conversion ratio (1 to 2 wk, 1.439 vs. 1.505; 1 to 4 wk, 1.510 vs. 1.582) than those fed NC diet during 1 to 2 wk and 1 to 4 wk. A higher (P < 0.05) blood IgG (1.80 vs. 1.45 mg/dL) concentration was observed in PRO2 treatment compared with that in NC treatment. The relative weight of liver (3.69 vs. 3.13%) and abdominal fat (1.72 vs. 1.45%) in PRO2 was higher (P < 0.05) than in NC. No differences (P > 0.05) were found on meat quality among treatments. In conclusion, results indicated that the use of propolis at the 0.10% level increased growth performance, blood IgG concentration and relative organ weight in broilers.

Key Words: broiler, growth performance, relative organ weight