Effects of adding an enhanced flavor to the creep feed on the proportion of piglets consuming creep feed and pre-weaning performance. R. C. Sulabo*, J. M. DeRouchey1, M. D. Tokach1, C. D. Risley2, R. D. Goodband1, S. S. Dritz2, and J. L. Nelssen1, 1Kansas State University, Manhattan, 2Luctar USA Inc., Northbrook, IL.

A total of 50 sows (PIC Line 1050) were used in the study to determine the effects of adding an enhanced flavor to the diet on the proportion of piglets consuming creep feed within litters and pre-weaning performance. Sows were blocked according to parity and date of farrowing and were allotted to two experimental treatments using a randomized complete block design. Treatment 1 was a creep diet with no flavor (Control) and Treatment 2 was the Control diet with the enhanced flavor (Luctarom®) included at 1500 ppm. Both creep diets contained 1.0% chonic oxide and were offered ad libitum from d 18 until weaning (d 21) using a rotary creep feeder with hopper. A single lactation diet (3,503 kcal ME/kg, 0.97% TID Lys) was used, and sows were allowed free access to feed throughout lactation. Fecal samples from all piglets were taken twice using sterile swabs between 3 and 12 h before weaning. Piglets were categorized as ‘eaters’ when the fecal sample was colored green at least once on any of the two samplings. Little lactation weights (66.7 vs. 66.5 kg; P > 0.94), total gain (8.9 vs. 8.8 kg; P > 0.77), and daily gain (3.0 vs. 2.9 kg; P > 0.77) were not different between litters fed creep with and without the enhanced flavor. For individual pigs, weaning weight (6.5 vs. 6.6 kg; P > 0.53), total gain (0.87 vs. 0.88 kg; P > 0.89), and average daily gain (0.29 vs. 0.29 kg; P > 0.89) between the two treatments also were not different. Flavor added to the creep feed did not influence both total (0.60 vs. 0.63 kg; P > 0.66) and daily (202 vs. 211 g; P > 0.66) creep feed intake of litters and the proportion of creep feed eaters (73 vs. 69%; P > 0.41) in whole litters. When creep was provided for 3 d before weaning, adding the enhanced flavor to the creep feed did not affect litter creep feed intake, the proportion of piglets consuming creep feed, and pre-weaning performance.

Key Words: Flavor, Creep Feed, Piglet

Diet preference and growth performance in weanling pigs fed diets with Morinda citrifolia (noni). C. Feoli*, J. D. Hancock1, K. C. Behnke1, and R. G. Godbee2, 1Kansas State University, Manhattan, 2Morinda Agricultural Products, Orem, UT.

Two experiments were conducted to determine the effects of concentration (none, 0.75, 1.5, 3.0, and 6.0%) of Morinda citrifolia (Tahitian Noni International, Orem, UT) and diet complexity in weanling pigs. In Exp. 1, 210 pigs (average initial BW of 6.1 kg) were used. There were seven pigs/pen and six pens/treatment during the 35-d growth assay. Diets were corn-soy-based and had 20% whey, 10% lactose, and 5% plasma protein for d 0 to 7, 15% and 2.5% plasma protein for d 7 to 21. Lysine concentrations were 1.8% for d 0 to 7, 1.6% for d 7 to 21, and 1.4% for d 21 to 35 with feed and water consumed on an ad libitum basis. Average daily gain (quadratic effect, P < 0.03) and G:F (quadratic effect, P < 0.08) for pigs fed diets without and with noni. However, for d 15 to 29 and overall (d 0 to 29) ADG and ADFI were decreased (P < 0.04) for pigs fed diets with noni compared to the control. In conclusion, there was a preference for diets with noni for the first 15 d of the preference study. In the growth assay, prolonged feeding of diets with noni resulted in reduced feed intake and, ultimately, decreased rate of gain. Thus, it seems likely that any advantages to inclusion of noni will be in the early portions of the nursery phase.

Key Words: Pig, Morinda citrifolia, Noni

Cloning of Ningxiang porcine growth hormone gene and its construction respectively of prokaryotic and eukaryotic expression vector. W. C. Wang1, W. Y. Chu1, W. T. Gu1, M. M. Geng1, T. J. Li1, Y. L. Yin*, and G. Y. Wu1,2, 1The Chinese Academy of Sciences, Changsha, Hunan, P. R. China, 2Texas A&M University, College Station.

The Ningxiang pig (a Chinese swine breed) has a relatively small body size but its meat has a special flavor of economic importance. To elucidate the mechanisms responsible for the slow rate of growth in this swine breed, we decided to clone the Ningxiang porcine growth hormone