this DFM to LF or HF diets had no effect on growth performance, but increased HCW.

Key Words: direct-fed microbial, fiber, pig

793 Effect of a 3-strain *Bacillus*-based direct-fed microbial on growth performance, volatile fatty acid production, carcass characteristics, and gastrointestinal tract weights in growing-finishing pigs fed low or high fiber diets. Neil W. Jaworski*[1], Augustine Owusu-Asiedu[2], Ajay Awati[2], Alastair Thomas[2], and Hans H. Stein[1], *[1]University of Illinois at Urbana-Champaign, Urbana, IL, [2]Danisco Animal Nutrition, DuPont Industrial Biosciences, Marlborough, UK.*

The effect of a 3-strain *Bacillus*-based direct-fed microbial (DFM) on growth performance, VFA production, carcass characteristics, and gastrointestinal tract weights in growing-finishing pigs was evaluated. A total of 160 pigs (initial BW: 26.61 ± 2.17 kg) were randomly allotted to a 2 × 2 factorial design with 2 diet types [low fiber (LF) or high fiber (HF)] and 2 levels of DFM [0 or 60 g DFM (2.4×10^{12} cfu/kg feed)/t of feed] and 4 pigs per pen. Grower and early finisher diets were fed for 5 weeks and late finisher diets were fed for 24 d. The LF diets contained corn and soybean meal as main ingredients and HF diets contained corn, soybean meal, corn distillers dried grains with solubles (30%) and wheat middlings (10%). One pig/pen was harvested at the conclusion of the experiment. Cecum and rectum contents were analyzed for VFA, and carcass characteristics and gastrointestinal tract weights were measured. Data were analyzed as a 2 × 2 factorial with DFM level, diet type, and the interaction of DFM and diet type as fixed effects and rep as a random effect using the Mixed procedure of SAS. Results indicated that for the overall growing-finishing period, there was no difference in ADG between pigs fed LF and HF diets, but pigs fed HF diets had greater ($P < 0.01$) ADFI (2.5 vs. 2.4 kg/d), reduced ($P < 0.01$) G:F (0.36 vs. 0.37 kg/kg), reduced ($P < 0.05$) dressing percentage (77.5 vs. 78.2%), and increased ($P < 0.05$) weight of empty intestinal tract ($P < 0.05$) compared with pigs fed LF diets. Pigs fed LF diets had a greater ($P < 0.05$) concentration of propionate in cecum contents and greater ($P < 0.05$) concentrations of all VFA in rectal contents compared with pigs fed HF diets. Pigs fed diets supplemented with DFM had greater ($P \leq 0.05$) HCW (88.5 vs. 84.3 kg) and backfat thickness than pigs fed diets with no DFM, but fat-free lean percentage was reduced ($P < 0.05$). In conclusion, pigs fed HF diets had greater overall ADFI, lower G:F, and a lower dressing percentage than pigs fed LF. The addition of