

- 323 Digestibility of Amino Acids, Fiber, and Fat and Concentrations of Digestible and Metabolizable Energy in Two Sources of Distillers Dried Grains with Solubles Fed to Growing Pigs.** D. A. Rodriguez*, S. A. Lee, H. H. Stein, *University of Illinois at Urbana-Champaign, Urbana, IL*

Two experiments were conducted to test the hypothesis that digestibility of AA, GE, acid hydrolyzed ether extract (AEE), NDF, and ADF, as well as DE and ME in 2 sources of distillers dried grains with

solubles (DDGS) are similar despite different concentrations of AEE. In Exp. 1, 12 growing barrows (initial BW: 55.2 ± 3.6 kg) that had a T-cannula installed in the distal ileum were allotted to a 2-period cross-over design with 3 diets. Two diets contained either Dakota Gold (POET Nutrition, Sioux Falls, SD) with 6.82% AEE or conventional DDGS with 9.54% AEE as the sole source of AA. The third diet was an N-free diet that was used to determine the basal endogenous losses of AA from the pigs. Ileal digesta were collected for 2 d after 5 d of adaptation. Greater ($P < 0.05$) standardized ileal digestibility (SID) of CP (84.6 vs. 74.8%) and Lys (68.1 vs. 53.0%) was observed in pigs fed Dakota Gold DDGS compared with pigs fed conventional DDGS. The SID of Arg, His, Met, Phe, and Val were also greater ($P < 0.05$) in Dakota Gold DDGS than in conventional DDGS and the SID of Ile, Leu, and Thr tended ($P < 0.10$) to be greater in Dakota Gold DDGS than in conventional DDGS. In Exp. 2, 24 barrows (initial BW: 17.3 ± 1.3 kg) were allotted to a corn-based basal diet or to a diet containing corn and Dakota Gold DDGS or corn and conventional DDGS. Pigs were housed individually in metabolism crates and feces and urine were collected quantitatively for 5 d after 7 d of adaptation. The ATTD of AEE (68.4 vs. 51.9%), NDF (60.6 vs. 49.9%), and ADF (66.1 vs. 56.0%) was greater ($P < 0.01$) in conventional DDGS than in Dakota Gold DDGS, but no difference in the ATTD of GE was observed. The GE, DE, and ME in Dakota Gold DDGS were 4,442, 3,017, and 2,743 kcal/kg, respectively, but GE, DE, and ME in conventional DDGS (4,831, 3,244, and 2,965 kcal/kg, respectively) were greater ($P < 0.001$) than in Dakota Gold DDGS. In conclusion, the SID of most AA was greater in Dakota Gold DDGS compared with conventional DDGS, but DE and ME and ATTD of AEE, NDF, and ADF were greater in conventional DDGS than in Dakota Gold DDGS.

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