

**490 Effect of dietary level of distillers dried grains with solubles (DDGS) on growth performance, mortality, and carcass characteristics of grow-finish barrows and gilts.** D. Cook\*<sup>1</sup>, N. Paton<sup>1</sup>, and M. Gibson<sup>2</sup>, <sup>1</sup>Akey, Lewisburg, OH, <sup>2</sup>Dakota Gold Research Association, Sioux falls, SD.

The objective of this trial was to determine the effect of feeding 0, 10, 20, or 30% DDGS from a new generation ethanol plant on growth performance and carcass characteristics of grow-finish barrows and gilts (42 kg initial body weight) reared in a commercial environment. Pigs were split-sexed housed (26 pigs/pen) in a commercial grow-finish barn (1,040 pigs per barn) and randomly allotted within sex and weight block (five blocks) to one of four DDGS levels. Diets were formulated on a digestible amino acid basis with the 1998 NRC values for corn and soybean meal. Key nutrient values used for DDGS were 3,420 Kcal ME/kg, 0.67, 0.62, and 0.31% digestible lysine, threonine, and methionine, respectively. Diets were formulated to be isocaloric by adjusting the dietary percentage of liquid fat. Pigs had ad libitum access to diets and water throughout the trial. There was no effect of DDGS inclusion on final pig bodyweight (116 kg), ADG, ADFI or gain to feed ratio, suggesting the nutrient values used for DDGS were appropriate. There was a linear decrease in mortality percentage (6.0, 2.8, 2.4, and 1.6%, respectively) as DDGS inclusion increased ( $P < 0.05$ ). Carcass yield decreased linearly (77.3, 76.6, 76.2, and 75.6%, respectively) as dietary DDGS inclusion increased ( $P < 0.01$ ). Back fat level and carcass lean percentage were not affected by the dietary DDGS level fed. The data suggest that up to 30% DDGS from this source can be included in the diet without affecting growth performance or carcass lean percentage and that DDGS may have value in a health challenged system for reducing mortality. The negative effect of feeding DDGS on carcass yield should be accounted for in evaluations of its economic value.

**Key Words:** DDGS, Pig, Carcass