

Determination of the impact of feeding increasing levels of corn dried distillers grains on the performance of growing-finishing pigs reared under commercial conditions

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Traditionally, DDGS has been fed to ruminants because it has lower lysine and greater fiber content than do other ingredients typically fed to pigs. New ethanol plants use advanced processing techniques and better quality control which should lead to higher quality and more consistent nutrient profile of DDGS than what older ethanol plants produce. The objective of this trial was to determine the impact of increasing levels of DDGS from a new generation ethanol plant on live animal performance, carcass characteristics and IOFC.

A total of 1,008 pigs were used in a 53 day experiment to determine the impact of feeding increasing levels of corn DDGS on growth performance, feed disappearance, feed cost per kg of gain, and income over feed cost. The 6 dietary treatments were based on level of DDGS in the diet (0, 5, 10, 15, 20, and 25%), with treatment diets fed in 3 phases from 36 to 50, 50 to 70, and 70 to 90 kg. Feeding increasing levels of DDGS in the diet resulted in greater growth rate, similar feed disappearance, and lower feed:gain. Feed disappearance and carcass grading characteristics was not impacted by increasing levels of corn DDGS in the diet. We estimate the better growth rate and feed:gain with increasing levels of the DDGS may be a result of underestimation of the nutrient content (energy) of the DDGS. Based on the results of this trial feeding corn DDGS from this new generation ethanol plant can be included up to 25% of the diet with similar biological and economic performance to feeding traditional Western Canadian ingredients.

Implications: Corn DDGS from this new generation ethanol plant can be fed up to 25% of the diet as an economically feasible alternative ingredient in Western Canadian swine diets.