

Evaluation of corn grain with the genetically modified event DAS-59122-7 fed to
growing-finishing pigs

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An experiment was conducted to assess the nutritional equivalency of corn grain with the genetically modified input trait Cry34/45Ab1 containing the DAS 59122-7 event. This modified transgenic grain is resistant to western corn rootworm and is also tolerant to the herbicide glufosinate-ammonium. The modified grain, a non-transgenic near-isoline control grain, and a commercial hybrid were grown in 2005 in isolated plots (201m apart) at the same location. A total of 108 pigs were allotted to corn-soybean meal diets containing each of the 3 grains as the sole source of corn. Pigs were fed grower diets from 37 to 60 kg, early finisher diets from 60 to 90 kg, and late finisher diets from 90 to 127 kg. Within each phase, data for ADG, ADFI, and G:F were calculated. At the conclusion of the experiment, pigs were harvested at a meat science laboratory and data for carcass quality were collected. Estimate statements were used to compare values from pigs fed diets containing the control corn and pigs fed diets containing the modified corn. Pigs fed diets produced with conventional corn were used as an additional comparator creating tolerance intervals to evaluate the biological significance of any statistical differences. For the entire experimental period, pigs fed the control and the modified corn

had similar final BW (128.9 vs. 127.1 kg), ADG (1.02 vs. 1.00 kg per day), ADFI (2.88 vs. 2.80 kg per day), and G:F (0.356 vs. 0.345 kg per kg). Likewise, no differences in dressing percentage (76.48 vs. 76.30%), loin eye area (49.8 vs. 50.4 cm²), 10th rib back fat (2.20 vs. 2.12 cm) and lean meat (52.9 vs. 53.4%) were observed between pigs fed the control and the modified corn grain. It is concluded that the nutritional value of the modified transgenic corn grain containing event DAS-59122-7 is similar to that of its non-transgenic counterpart.

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