

# Feeding Triticale to Market Pigs

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Newer varieties of triticale (X Triticosecale Wittmack L.) have the potential to become an important alternative feed grain in western Canada. Increased acreages, improved yields, increased starch content and highly digestible nutrients have caused a resurgence of interest in this crop for swine diets.

This experiment compared live performance of hogs fed diets based on corn, hulless barley (cv Falcon), triticale (cv Pronghorn) and a 50:50 mixture of hulless barley and triticale. Seventy-two pigs (36 barrows, 36 gilts) of approximately 27 kg initial body weight of PIC genetics (Camborough X Canabrid) were allotted to treatments according to weight and sex (gilts and barrows). The feeding period was divided up into three phases (phase I, 28-51 kg; phase II, 51-84 kg; phase III, 84-110kg). Diets were formulated to meet or exceed the nutrient requirements (NRC 1988) during each of the three feeding periods. Synthetic lysine, methionine and threonine were used in the diets to achieve desired levels of these amino acids. Diets within each phase were not equalized for digestible energy and available lysine. However, digestible energy to available lysine ratios were maintained across treatments within each phase. There were no significant differences ( $P>0.05$ ) in ADG (885 - 935 g day<sup>-1</sup>), ADFI (2.5 - 2.66 kg day<sup>-1</sup>) and F/G (2.81 - 2.87) among treatment groups over the entire feeding period. However, barrows maintained significantly ( $P<0.05$ ) higher ADFI (2.65 vs 2.45) and ADG (949 vs 867) than gilts but had similar F/G (2.86 vs 2.84). The hulless barley/triticale treatment resulted in significantly higher ( $P<0.05$ ) backfat thickness (20.7mm) than the hulless barley (17.5mm) and triticale (17.9mm) treatments with the corn diets (19.7mm) being intermediate. Barley and triticale diets had higher ( $P<0.05$ ) lean yield (60.2, 60.2 vs 59.4, 58.7 percent) and grade indexes (109.2, 109.6 vs 106.5, 106.4) than corn and the hulless barley/triticale diets respectively.

**Implications:** Pronghorn triticale can fully replace corn or hulless barley in the diets of market hogs with no significant difference in pig performance. These data suggest that the newer varieties of triticale appear to be palatable with low levels of anti-nutritive factors.