

Effects of high fibre and its source on the growth and slaughter performance of pigs fed maize soybean diets fortified with Roxazyme® G²

F Fushai
University of Venda, South Africa

The effects of high fibre (250 g/kg dry matter (DM) total dietary fibre (TDF)) from different feeds on growth and slaughter performance were investigated in pigs fed maize-soybean diets fortified with Roxazyme® G². Different fibre sources were maize (Zea mays) cobs (MC), soybean hulls (Glycine max)(SH), brewer's (barley; Hordeum vulgare L) grains (BG), Lucerne (Medicago sativa) hay (L) or wheat (Triticum aestivum) bran (WB). A standard diet (141 g/kg DM TDF) served as a control. Diets were mixed in duplicate, and one mixture was fortified with 200 mg Roxazyme® G²/kg feed. In vitro methods were used to estimate fibre fermentability. The study used 72 intact Large White X Landrace, male pigs (32.0 ± 5.6 kg live weight). The diets were fed for 70 days in a complete randomized design with a 6X2 factorial arrangement of the treatments. Digestibility was estimated at 65 and 70 kg LW using C₂D₃ as the indigestible marker. Depending on the source, high fibre reduced (P<0.05) feed intake (BG and L), the digestibility of organic matter (WB, BG, MC), protein (BG, MC, WB), fat (WB, L), phosphorus (BG), ash (MC, SH) and energy (all fibres). Maize cob increased (p<0.05) the feed: gain ratio. Lucerne reduced (P<0.05) daily gain and dressing % and, similar to WB increased (p<0.05) lean %. Roxazyme® G² had no effect on any of the measured parameters. The results supported a fermentable-fibre approach to maintain nutrient digestibility on fibrous diets. Supplementation with Roxazyme® G² was justified.

Biography