

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

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The effects of high fibre (250 g kg<sup>-1</sup> dry matter (DM) total dietary fibre (TDN)) from different fibre sources were investigated in a slaughter performance study. Pigs were fed maize-soybean diets fortified with Roxazyme<sup>®</sup> G. The fibre sources were maize (Zea mays) cobs (C), soybean hulls (*Glycine max*) (S), brewer's (barley; *Hordeum vulgare*) grains (B), lucerne (*Medicago sativa*) hay (L) or wheat (*Triticum aestivum*) bran (W). A standard diet (141 g kg<sup>-1</sup> DM) served as a control. Diets were supplemented with 200 mg of Roxazyme<sup>®</sup> G (0.2%) kg<sup>-1</sup> feed. *In vitro* digestions were used to estimate fibre fermentation characteristics. The study used 72 lactating sows of a single breed, weighing 32.0–5.6 kg live weight. The diets were fed *ad libitum* for 70 days. A complete randomized block design with a 6 × 2 factorial arrangement of treatments was used. Digestibility was estimated at 65–70 kg live weight using Cr<sub>2</sub>O<sub>3</sub> as a digesta marker. Dependent variables were: feed intake (g kg<sup>-1</sup> live weight), digestibility of organic matter (OM, B, C, W), protein (B, C, W), fat (B, W), phosphorus (B, W), ash (C, S) and energy (all fibres). Maize cobs significantly ( $p < 0.05$ ) affected the feed: gain ratio. Lucerne significantly ( $p < 0.05$ ) affected the feed: gain ratio, similar to B, increase ( $p < 0.05$ ) feed: gain ratio. The effect of the fibre source on the feed: gain ratio was not significant. The results support the use of fibre-approach to the total dietary fibre of broilers. Supplementing with Roxazyme<sup>®</sup> G was not effective.

### Biography

main research interest is in animal nutrition and sustainable agriculture.