

ẢNH HƯỞNG CỦA TỶ LỆ PHỐT PHO VÀ BỔ SUNG PHYTASE TRONG KHẨU PHẦN ĐẾN NĂNG SUẤT SINH TRƯỞNG, PHÁT THẢI NH₃ VÀ H₂S TỪ CHẤT THẢI CỦA LỢN THỊT

Nguyễn Hữu Minh¹, Vũ Thị Khánh Vân², Trần Thị Bích Ngọc², Vũ Chí Cường^{2*} và Lê Đình Phùng³

¹Sở nông nghiệp và phát triển nông thôn Nghệ An; ²Viện chăn nuôi, ³Khoa chăn nuôi, Thú y, Đại học nông lâm Huế

Tác giả liên hệ: Vũ Chí Cường, Email: vn1899@gmail.com

ABSTRACT

Effect of available phosphorus levels and phytase supplementation in the diet on pig performance and NH₃, H₂S emissions from slurry

The aim of this study was to evaluate the effect of available phosphorus levels and phytase supplementation in the diet on pig performance and NH₃, H₂S emissions from slurry. Thirty exotic cross-bred pigs (Duroc x F1 (Landrace x Yorkshire)) with body weight around 22 kg were divided into 6 treatments and were designed according to completely randomized design with 2 factors (3 available phosphorus levels: high, medium, low; and with or without Biomin phytase 5000). Each treatment had 5 replications. The pigs were kept individually in concrete floored pens (2.2 m x 0.8 m). The results show that decreasing available phosphorus level in pig diet (from 0.50 down to 0.45 in period 20-40 kg; from 0.45 down to 0.35 in period 40-70 kg and from 0.40 down to 0.30 in period 70 kg - slaughter) had no effect on average daily gain and feed conversion ratio, however continuing to reduce available phosphorus level (from 0.45 down to 0.30 in period 20-40 kg; from 0.35 down to 0.19 in period 40-70 kg and from 0.30 down to 0.10 in period 70 kg - slaughter) resulted in pig performance. Phytase supplementation in the diet had positive impact on average daily gain and feed conversion ratio, as well as decreased NH₃ and H₂S emissions.

Key words: available phosphorus, emissions, pig, phytase