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ACCEPTED MANUSCRIPT

The impact of reducing dietary crude protein and increasing total dietary fiber on hindgut fermentation, the methanogen community and gas emission in growing pigs

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Highlights

- Despite the enteric origin, a fraction of 9.7 % of CH₄ emitted from the slurry pit
- Methanogen concentration increased throughout the cecum-colon tract
- NH₃ losses reduced 8.6 % per each percentage decrease in CP content of the diet
- Differences in CH₄ emission did not reflect the methanogen concentration

Abstract

Sixty-four cross bred 6 week-old intact male pigs (initial BW =13.8 \pm 2.3 kg) were randomly distributed to 4 separated modules using a three-phase feeding program in which two dietary crude protein (CP) and total dietary fiber (TDF) levels were tested in a 2 \times 2 factorial

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