Accepted Manuscript

Title: Use of protected zinc oxide in lower doses in weaned pigs in substitution for the conventional high dose zinc oxide

Authors: Santi Devi Upadhaya, Young Min Ki, Kwang Young Lee, In Ho Kim

PII: S0377-8401(17)31269-5

DOI: https://doi.org/10.1016/j.anifeedsci.2018.03.012

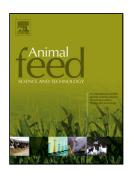
Reference: ANIFEE 13966

To appear in: Animal Feed Science and Technology

Received date: 14-10-2017 Revised date: 9-3-2018 Accepted date: 24-3-2018

Please cite this article as: Upadhaya SD, Ki YM, Lee KY, Kim IH, Use of protected zinc oxide in lower doses in weaned pigs in substitution for the conventional high dose zinc oxide, *Animal Feed Science and Technology* (2010), https://doi.org/10.1016/j.anifeedsci.2018.03.012

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Use of protected zinc oxide in lower doses in weaned pigs in substitution for the conventional

high dose zinc oxide

Running head: Protected zinc oxide in weaned pigs

Santi Devi Upadhaya¹, Young Min Kim, ¹ Kwang Young Lee¹and In Ho Kim^{*1}

Highlights

Dietary supplementation of protected vs conventional ZnO was evaluated in weaning pig.

Growth performances in pigs fed protected ZnO at lower dose were comparable to high dose

conventional ZnO.

Nutrient digestibility was also comparable in pigs fed protected vs conventional ZnO.

Fecal Zn concentration was reduced in protected versus conventional ZnO treatment.

*Department of Animal Resource and Science, Dankook University, No.29 Anseodong, Cheonan,

Choongnam 330-714 South Korea

Abstract

This study tested the hypothesis that protected zinc oxide (ZnO) in lower doses can substitute

the high dose conventional ZnO in weaned pigs for improved growth performance and

alleviation of digestive disorders. A total of 150 crossbred weaning pigs (28 days old) with an

average body weight (BW) of 6.48 ± 1.58 kg were blocked and stratified based on sex and

randomly allotted to 1 of 6 dietary treatments [5 pigs per pen (2 barrows and 3 gilts); 5 pens

per treatment] for a 6- wk trial in two phases. Treatments consisted of basal diet (NC); Basal

diet without Zn in mineral premix with either 2500 ppm unprotected ZnO (PC) or 250, 500, 750

*Corresponding author: In Ho Kim

Tel: 82-41-550-3652; Fax: 82-41-565-2949

E-mail: inhokim@dankook.ac.kr

Download English Version:

https://daneshyari.com/en/article/8490957

Download Persian Version:

https://daneshyari.com/article/8490957

<u>Daneshyari.com</u>