

# An experimental study on the production performance of piglets administered with Tanpro® instead of antibiotics and ZnO.

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## Introduction

Tanpro® (containing 70% tannic acid) is a product of Tannalbin produced through special processes of chemical reactions between soy protein and the tannic acid, which is screened and optimized to have strong astringent activities. This rearing trial firstly reports the antidiarrheal effects of Tanpro on post-weaning piglets and its effect on animal production performance; and examines the application differences between Tanpro and Colistin Sulphate or ZnO.

## 1. Rearing Trial Subjects and Methods

210 weaned piglets of 24 days were randomly assigned to 7 groups for rearing trials as indicated in table 1:

Table 1: Grouping and Rearing Trials (mg/kg)

	Group 1 Control	Group 2 ZnO	Group 3 Colistin Sulphate	Group 4 Tanpro 0.1%	Group 5 Tanpro 0.2%	Group 6 Tanpro 0.3%	Group 7 Tanpro 0.4%
Basal Diet	Basal Diet	Basal Diet	Basal Diet	Basal Diet	Basal Diet	Basal Diet	Basal Diet
Zno-Zn	—	2250	—	—	—	—	—
Colistin Sulphate	—	—	20	—	—	—	—
Tanpro	—	—	—	1000	2000	3000	4000

## 2. Result

Table 2 indicates: addition of Tanpro increases the piglets' feed intake and daily weight gain while decreasing the FCR; 0.4% Dosage Group delivers the best performance.

Table 2 The effects of Tanpro on piglets' growth performance

	Group 1 Control	Group 2 ZnO	Group 3 Colistin Sulphate	Group 4 Tanpro 0.1%	Group 5 Tanpro 0.2%	Group 6 Tanpro 0.3%	Group 7 Tanpro 0.4%
ADG (g)	282±26.5a	358±24.2b	297±25.3c	306±22.1c	321±22.8d	346±21.8b	372±31.4b
FCR	2.084±0.206a	1.723±0.128b	1.977±0.232c	1.928±0.212c	1.883±0.206d	1.755±0.181b	1.684±0.154b

Table 3 shows that addition of Tanpro can reduce the diarrheal rate of weaned piglets. 4000 ppm Dosage Group shows the best effect.

Table 3: Effect of Tanpro added into feed on the diarrheal rate of weaned piglets

	Group 1 Control	Group 2 ZnO	Group 3 Colistin Sulphate	Group 4 Tanpro 0.1%	Group 5 Tanpro 0.2%	Group 6 Tanpro 0.3%	Group 7 Tanpro 0.4%
Diarrheal Rate (%)	57.3±6.86a	15.3±2.42b	46.7±5.32a	36.7±4.12c	25.3±3.06d	20.7±3.21d	14.7±2.54b

## 3. Conclusion

If used in post weaning piglets, Tanpro® can effectively reduce diarrhea rate and significantly improve their production performance, also indicating obvious dose-response dose effects. Addition of Tanpro @4000 mg/kg proved to have more salutary effects than Zinc @ 2250 mg/kg and Colistin Sulphate @ 20 mg/kg on diarrhea control and promotion of production performance. The tests confirmed that Tanpro is an efficacious and safe alternative to ZnO and feed antibiotics.