

## BiOWiSH® MultiBio 3PS

### Swine Feed Additive Hoang Long Swine Cooperative, Vietnam

BiOWiSH® Feed Additive Contributes to Profitability Increase of 32% on Vietnam Swine Farm

#### Executive Summary

Hoang Long Swine Cooperative, under the direction of the Vietnamese Farmers Union (VNFU) and the local BiOWiSH Technologies Distributor, BiOWiSH Vietnam, studied the effects of BiOWiSH® MultiBio 3PS on swine production.

Hoang Long Swine cooperative found that, when compared to the control feed, the BiOWiSH® MultiBio 3PS coated pig feed increased ADG by 12.10% and decreased FCR by 5.26%. Additionally, the BiOWiSH® treated pigs reached slaughter weights an average of 9 days sooner than the control contributing to increased profits of 32%.

#### Objective

The objective of this study was to determine the effects of BiOWiSH® MultiBio 3PS on pig production in Vietnam. Hoang Long Swine Cooperative is a market leader which applies resources to evaluate new solutions to increase production.

#### Background

The Hoang Long Swine Cooperative has a total area of 9,000m<sup>2</sup> with 9 livestock barns and 4,000 animals (market meat pigs, breeding pigs, nursery pigs). In addition to animal production, the facility produces their own feed, has an abattoir, packs the goods and distributes the final product to the marketplace.

### BiOWiSH® MultiBio 3PS

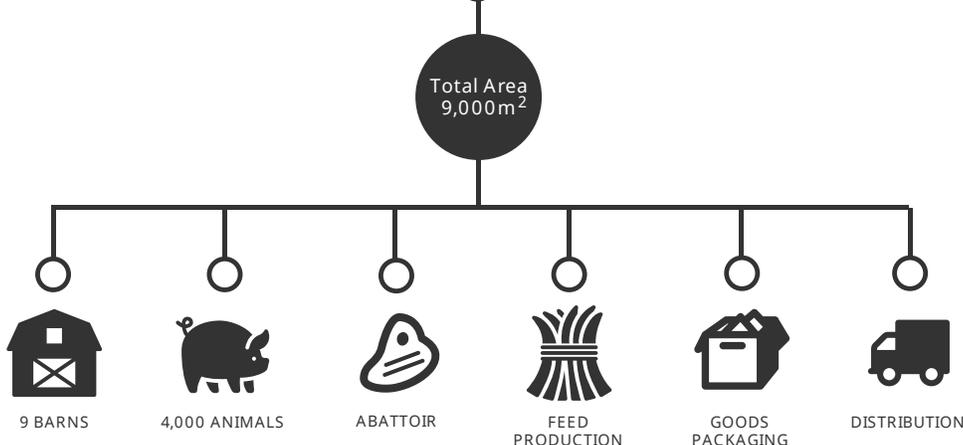


- Direct fed microbial (DFM) for animal and aquaculture production
- Provides beneficial microbials to livestock digestive system
- Recommended feed additive for all growth stages
- Can be either coated on animal feed or dosed directly to animal drinking water

#### Available Sizes

- 100g/3.5oz
- 1kg/2.2lbs
- 5kg/11lbs
- 10kg/22lbs

### HoangLong SWINE COOPERATIVE



Overview of Hoang Long Swine Cooperative

## Trial Implementation Program

The trial was conducted under the direction of BiOWiSH Vietnam and the Vietnam Farmers Union (VNFU) local and national departments. The trial was intended to last until pigs reached slaughter weight.

For this trial, BiOWiSH® MultiBio 3PS powder was added to roughly 1 liter of water, mixed thoroughly and activated for 15 minutes before coating the animal feed. BiOWiSH® MultiBio 3PS was dosed at a rate of 200g/mT of feed.

## Results

BiOWiSH® treatment resulted in:

- 12.10% increase in average daily gain (ADG)
- 5.26% decrease in feed conversion ratio (FCR)
- Pigs reaching slaughter weight 9 days sooner on average

	Control	BiOWiSH® MultiBio 3PS
Number of animals	236 pigs	249 pigs
Average initial body weight	16.53 kg	14.32 kg
Average ending body weight	102.5 kg	105.4 kg
Average growth	85.97 kg	91.08 kg
Pig age when sell	164 days	155 days
Average daily gain (ADG)	524.2 g/day	587.6 g/day
Average daily feed intake (ADFI)	2.08 kg	2.03 kg
Feed conversion ratio (FCR)	2.47	2.34
Antibiotic mixed in feed	yes	no

**Table 1.** Results of the control feed trial compared with the results of the BiOWiSH® MultiBio 3PS coated feed trial



## Testimonials

In addition to the quantified results in the table above Mr. Long, Director of Hoang Long Swine Cooperative, provided observations such as, “their skin looks better,” “the environment was cleaner with almost no smell,” and “the meat quality was superior.”

Following the initial feed coating trial, the Hoang Long Swine Cooperative continues to apply the BiOWiSH® MultiBio 3PS to the animal drinking water, maintaining the BiOWiSH® benefits and making the product application a simple process. Please see the Hoang Long Drinking Water Case Study for more details.

“We have used probiotics and enzymes from dozens of foreign firms, but there were no products that brought high efficiency like BiOWiSH®.”

-Mr. Long, Director of Hoang Long Swine Cooperative

## Economics

Detail	Control	BiOWiSH® MultiBio 3PS
Feed cost/kg (USD/kg)	\$0.44	\$0.44
Feed cost/pig (USD)	\$93.57	\$93.97
BiOWiSH® cost/pig (USD)	\$-	\$2.63
Vaccine cost/pig (USD)	\$0.83	\$0.83
Veterinary medicine (USD)	\$1.50	\$0.47
Nursery pig price (USD/pig)	\$79.50	\$74.44
Labor cost (USD) 6500x 4 = 26000/400 pig = 65000	\$2.91	\$2.91
Other expenses (USD) (electricity + water + other + depreciation of fixed assets)	\$4.48	\$4.48
Total cost each pig (USD/ pig)	\$182.80	\$179.74
Sale price (USD/kg)	\$2.06	\$2.06
Sale price/pig (USD/pig)	\$211.43	\$217.39
Profit each pig (USD/pig)	\$28.62	\$37.65
<b>Increased profit with BiOWiSH®</b>		<b>\$9.03</b>

**Table 2.** Economic impact of the control feed compared with the BiOWiSH® MultiBio 3PS coated feed per pig

## Conclusion

BiOWiSH® MultiBio 3PS is an effective tool that has positive impacts on animal performance, input cost and the environment when implemented in swine growing operations.

Benefits to the Hoang Long Swine Cooperative:

- Reduced grow period by 9 days
- Improved profit of \$9.03 per pig
- Minimized need for antibiotics use while maintaining or improving pig health

Long term benefits of using BiOWiSH® MultiBio 3PS:

- Higher quality of meat
- Higher annual profits
- More potential markets to sell the meat



*Swine at the Hoang Long Swine Cooperative involved in the case study*



**Contact us:**  
 animalag@biowishtech.com  
 +1 312 572 6700  
 biowishtech.com

BiOWiSH™ is a registered trademark of BiOWiSH Technologies International, Inc.

1125-07-EN