

# Aquaculture

# Shrimp Growout Ponds, Honduras Background

In order to demonstrate the effectiveness of BiOWiSH™ AquaFarm in shrimp aquaculture, Grupo de Suministro Neptuno began a validation program with one of the largest shrimp farms in Honduras. The program demonstrated that with a dose of 950g per hectare per crop, BiOWiSH™ AquaFarm increased yield, realizing a 6 times return on investment.

### **The Solution**

BiOWiSH<sup>TM</sup> AquaFarm is a powerful blend of probiotics that improves water quality by accelerating the removal of nitrogenous wastes and enhancing natural biological processes. BiOWiSH<sup>TM</sup> AquaFarm helps support optimal animal production in aquaculture systems. Proven applications include algae control, nutrient management, odor control, and feed supplementation (in countries with regulatory approval).

# **Implementation Program**

The validation began with four ponds, each measuring one hectare. Of the four, two were controls and two were BiOWiSH<sup>TM</sup> treated ponds. All the ponds used the same type and size of nauplii. During the 9 weeks of production, the BiOWiSH<sup>TM</sup> ponds used 950g of BiOWiSH<sup>TM</sup> AquaFarm per hectare per crop. The following table has a description of the dosing during the validation. At the end of the 9 weeks, the ponds were harvested and evaluated.

Month	BiOWiSH™ dose per ha per wk		
1	80		
2	120		
3 (only 1 week)	150		
4	950		

#### Results

An economic evaluation of the ponds reveals that BiOWiSH<sup>TM</sup> AquaFarm resulted in a \$417.88 USD per hectare increase in the value of the harvest. This represents a 6 times return on investment when using BiOWiSH<sup>TM</sup>. It is also important to note that a lower FCR was observed in the BiOWiSH<sup>TM</sup> treated ponds than the control ponds.

## **BiOWiSH™ AquaFarm**

- Supports optimal production
- Supports optimal performance in aquaculture systems
- Improves yield
- Improves survival rates
- · Improves mortality rates
- Improves growth rates
- Reduces incidence of infection and sickness
- Improves weight gain

#### **Available Sizes**

- 100g/3.5oz
- 1 kg/2.2lb



Table 1 - Production Results

Pond	Area (ha)	Age (weeks)	Survival %	Weight (g)	Lb/ha	FCR
BiOWiSH™ 1	1	9	61	14.00	2,223	1.08
BiOWiSH™ 2	1	9	63	13.36	2,319	1.06
Control 1	1	9	72	13.10	2,630	1.08
Control 2	1	9	51	16.30	1,856	1.12

Table 2 - Economic Analysis

Pond	Lb/ha	Weight (g)	Price/size (USD)	USD Total	USD Total per ha
BiOWiSH™ 1	2,223	14.0	1.77	3,935	0.000
BiOWiSH™ 2	2,319	14.5	1.77	4,105	8,039
Control 1	2,630	13.1	1.55	4,076	7 601
Control 2	1,856	16.3	1.91	3,545	7,621

# What is BiOWiSH™ technology?

BiOWiSH™ technology creates a powerful blend of probiotics that breaks down complex organic molecules to help eliminate waste, reduce odors, improve soil fertility, and enhance water quality. BiOWiSH™ products are safe for everyday use in a wide range of consumer and industrial applications.

Available in Asia, Australia, Europe, Africa and the Americas, BiOWiSH™ products provide a solution to some of the most complex problems of our time, from food production to environmental pollution.

#### **Contacts**

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