Teora

SCAN FOR WEBSITE

www.Teoralife.com

Accelerating Shrimp Health with Bio Sciences.

PROOF OF CONCEPT & REAL-WORLD VALIDATION

POWERED BY BIOTECH

SUSTAINED BY NATURE

PROVEN IN THE FIELD

FEEDING THE FUTURE.

We don't need more. We need to lose less, waste less, treat less, and grow smarter.

SOLUTIONS FOR SHRIMP AQUACULTURE

SHRIMPGUARD™

Proactive Protective Shield

Broad-spectrum immune-boosting biologic that continuously primes and sustains readiness and improves shrimp health.

Use it to stay ready before **disease strikes**

SHRIMPTRIDENT

Active Targeted Intervention

Pathogen-specific biologics to fight pathogens at early detection of infections in farms — Intervene. Reduce. Stabilise.

Deploy it to respond fast **on early detection**

Oral Feed-based format, Works across farm stages.

HACCP, ISO and GMP Certified

Antibiotic, Residue and Chemical free

100% Natural and Biodegradable

Room-Temp Stable. No Cold chain

Scientifically proven, safe, and effective across 10+ Trials

Adaptable & scalable. No infra-structure needed

Teora's disease management solutions for Shrimp farming —**ShrimpGuard™ and ShrimpTrident** have been rigorously evaluated through independent laboratory studies and commercial farm trials.

Across multiple geographies and production systems, these trials validate safety, feed-based delivery, and biological performance under real-world pathogen pressure—using measurable survival, health, and productivity outcomes.

04+

COUNTRIES (INDONESIA, VIETNAM, INDIA, SINGAPORE)

10+

TRIALS, LAB+ COMMERCIAL

TESTED IN L. VANNAMEI AND P. MONODON

27- 30 days typical trial window	**Storage: Room temperature (25-35°C)**	**Fine powder, Inclusion 1% (10g per kg feed)**
Administered Orally	**Works with standard feed types**	**Delivery Mode : Top-coated on standard feed**

Acclimation & Baseline

Shrimp acclimated under controlled conditions; baseline health and water parameters recorded.

Monitoring & Sampling

Water quality tracked continuously; biological samples collected at defined intervals

High-Pressure Pathogen Challenge

Trials included controlled pathogen-pressure models to validate proof of concept under worst-case conditions.

Outcome Measurement

Survival and performance tracked; molecular confirmation performed where applicable (qPCR-based readouts used in trials).

The following sections present individual trial designs and outcomes for ShrimpGuard™ and ShrimpTrident—highlighting how each solution performs across preventive and intervention use cases.

ShrimpGuard™ Trial Overview

Broad-Spectrum immune enhancing clean Biologic

ShrimpGuard™ was evaluated across controlled laboratory trials and commercial pond studies to validate safety, immune activation, and survival outcomes under high pathogen pressure. Trials were designed to reflect real farm risk windows, using oral, feed-based delivery only.

LAB TRIALS

Safety & Efficacy assessment

Oral trial - per os challenge ShrimpGuard™

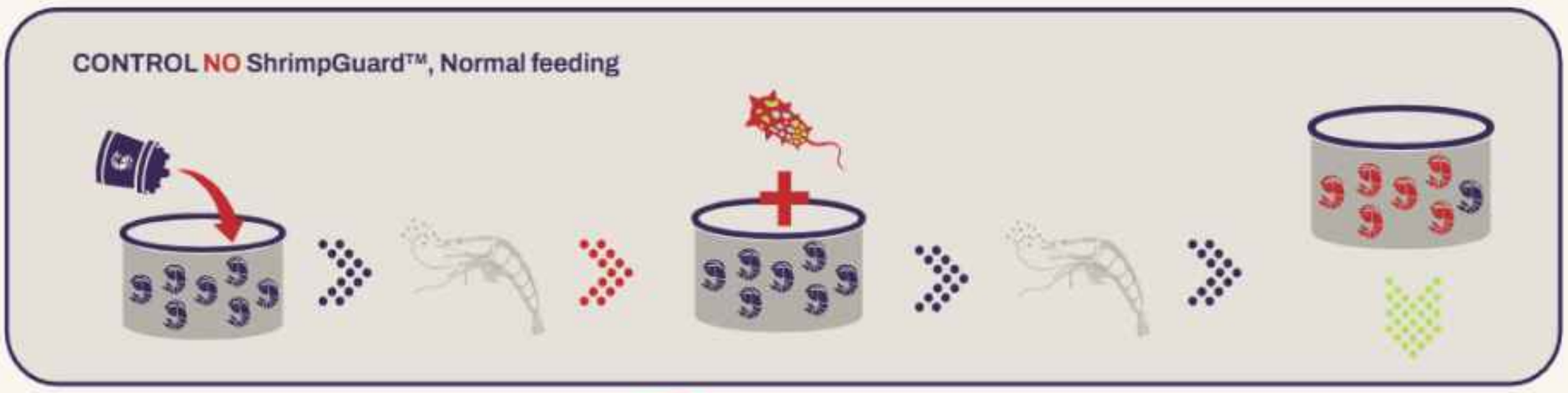
7 days continuous feeding

Timing
Start at DOC
23-30

Sample Size: 6- 10 shrimp per tank, 3 replicates per treatment group

Maintenance:
Once weekly after initial treatment

Experiment Design



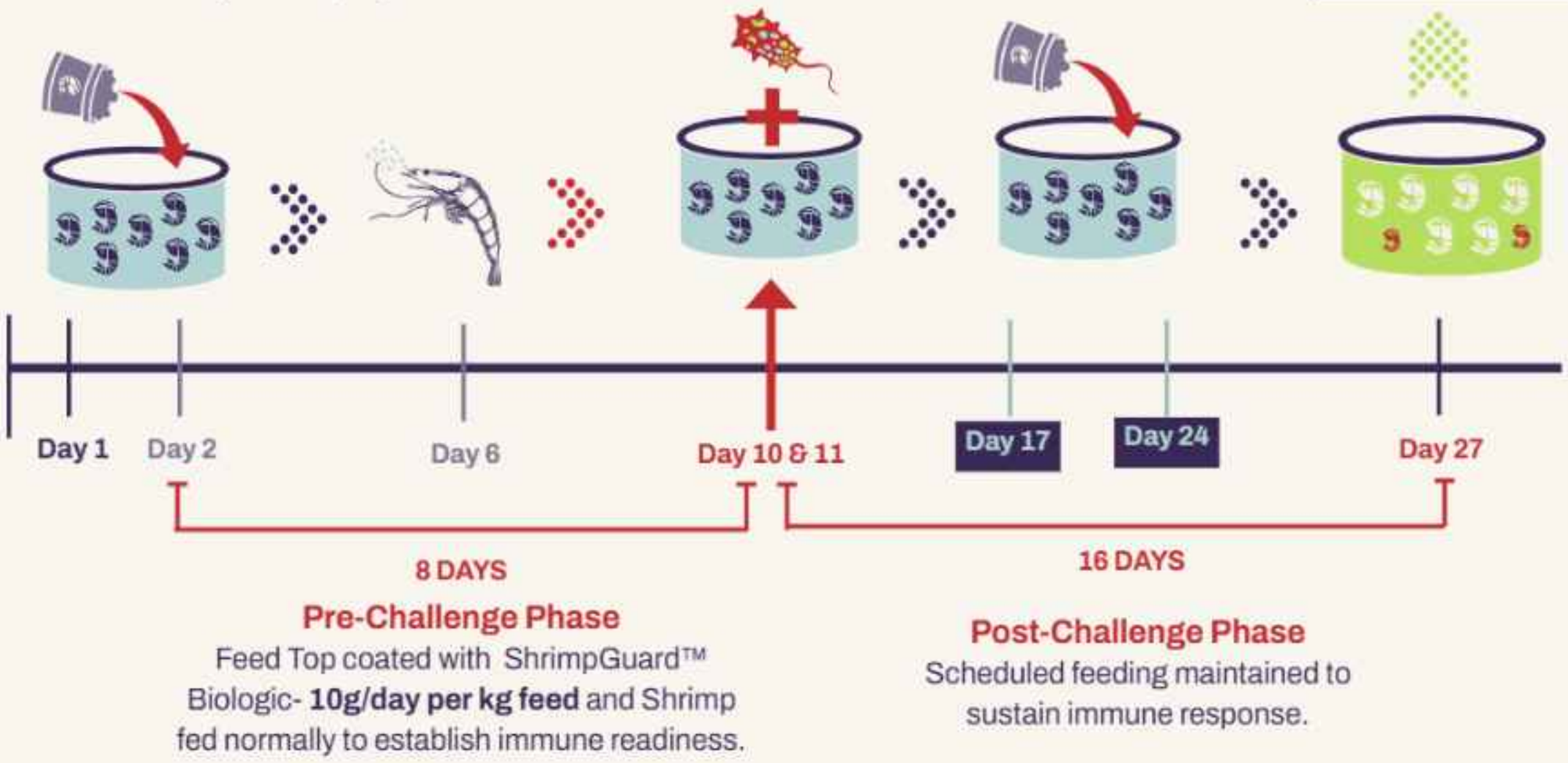
FEED WITH ShrimpGuard™, Top coated

Pathogen Per OS challenge

Challenge Phase
Shrimp exposed to high pathogen pressure to validate proof of concept.

FEED WITH ShrimpGuard™, Top Ups - on 6th & 13th days of post challenge

Monitoring Period
Survival, health markers, and pathogen indicators tracked.

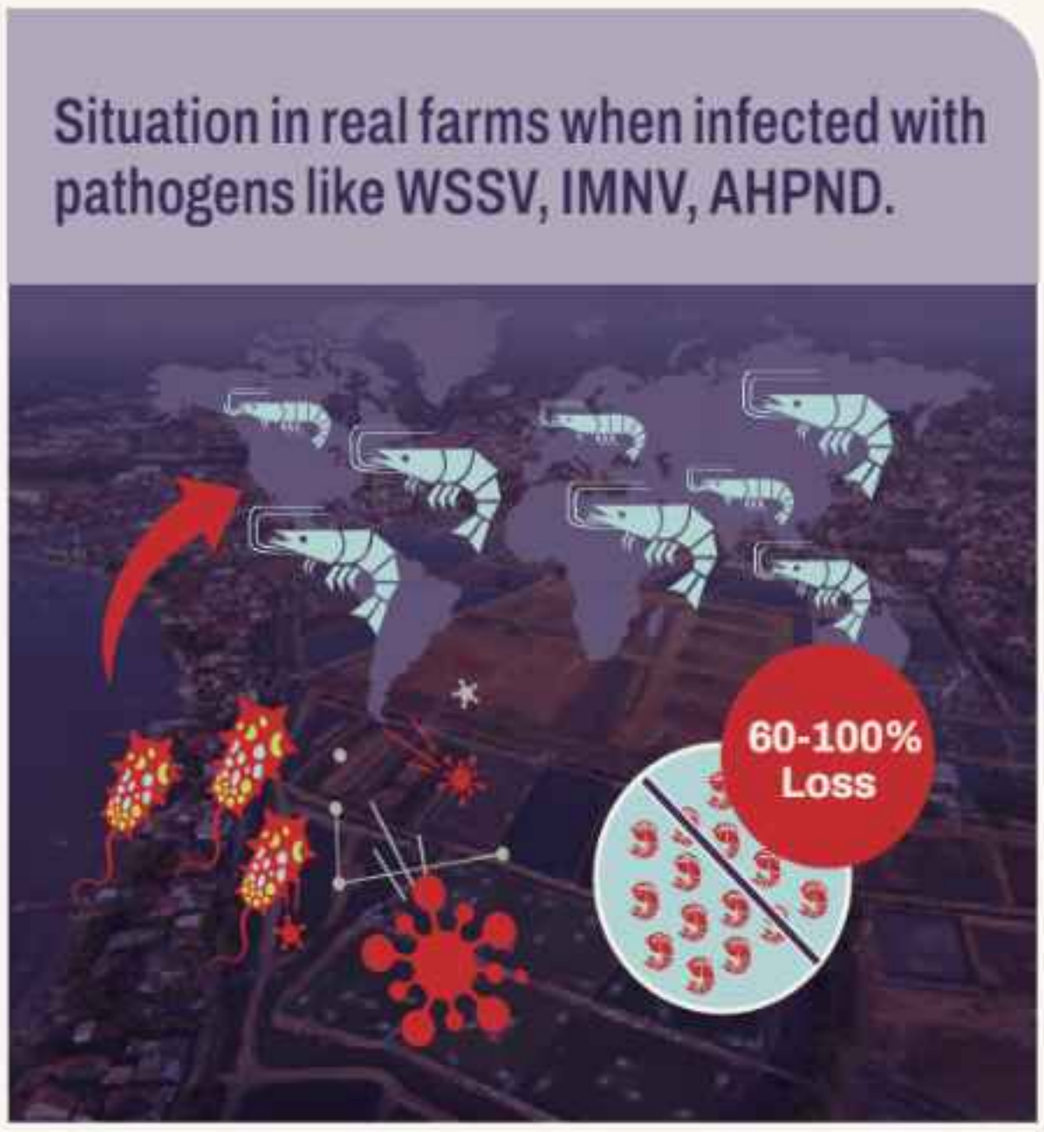


8 DAYS

Pre-Challenge Phase
Feed Top coated with ShrimpGuard™ Biologic- **10g/day per kg feed** and Shrimp fed normally to establish immune readiness.

16 DAYS

Post-Challenge Phase
Scheduled feeding maintained to sustain immune response.



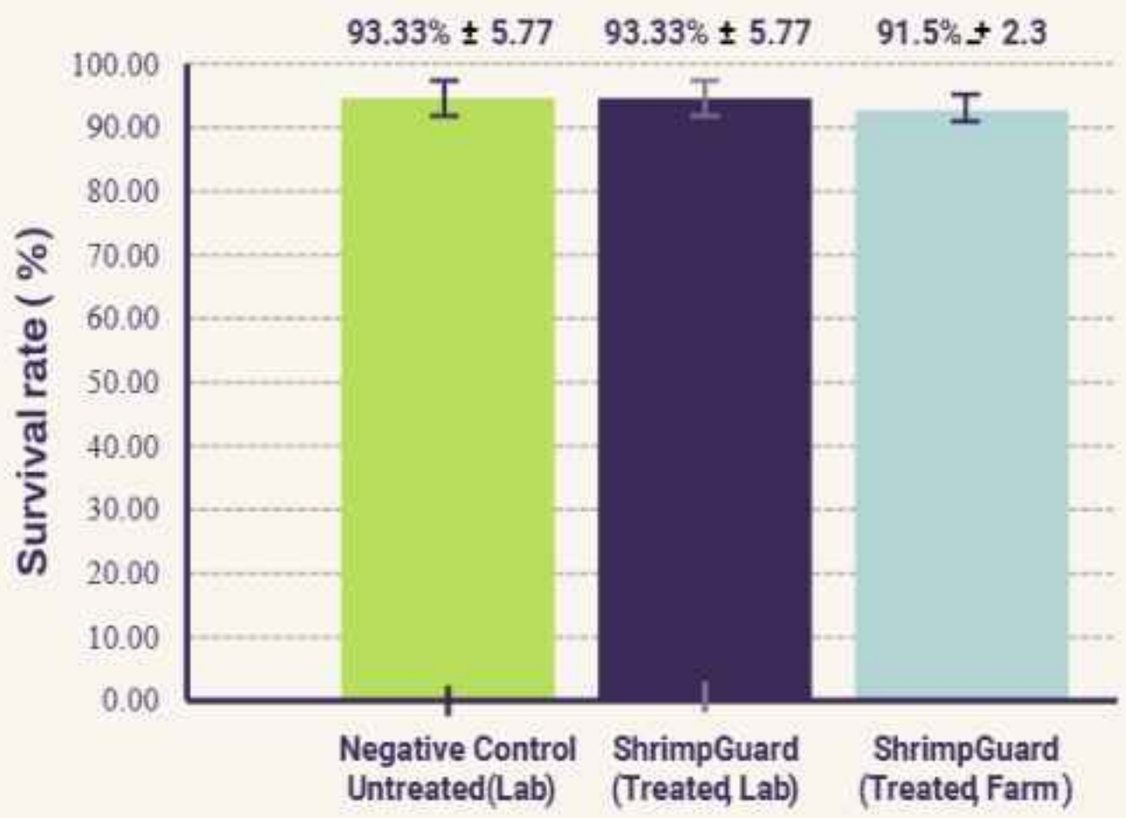
Efficacy & Safety Trial Outcomes

SHRIMPGUARD™
In Lab & Farm

Assessment of ShrimpGuard™ administered orally- Lab & Farm (Viral)

S. No	Treatment ID	Survival Rate %	SD (at 20 days post challenge)
1	Negative control (untreated, Lab)	93.33	5.77
2	Positive control (untreated + Viral challenge, Lab)	0	0
3	ShrimpGuard + viral challenge (e.g WSSV, In Lab)	↑ 93.33	5.77
4	Shrimp Farm Untreated	85.34	16.71
5	ShrimpGuard™ Treated Pond (Farm)	↑ 91.5	2.34

Efficacy assessment of ShrimpGuard™ (Viral challenge Lab)



0% Survival Without SHRIMPGUARD™

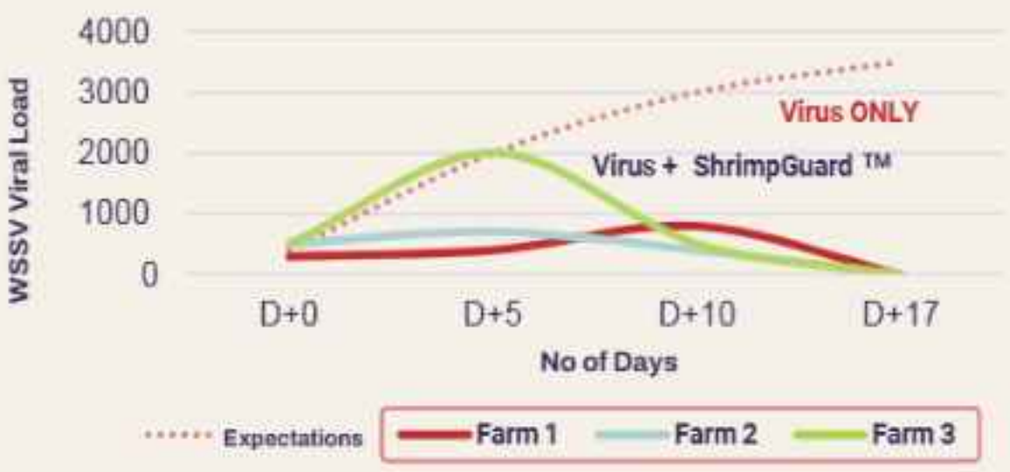
>85% Survival (RPS)* With SHRIMPGUARD™

Up to 45x survival improvement vs untreated control

Teora Report 05 >>>

Viral Load Reduction - Field Trials

Pathogen Genome Copies Over Time



As observed at farms that had natural infection of WSSV, and ShrimpGuard was used.

Pathogen pressure is reduced. Immune genes elevated. No negative impact on FCR or growth. **Better survival** and higher average weight at harvest.

VIRAL LOAD

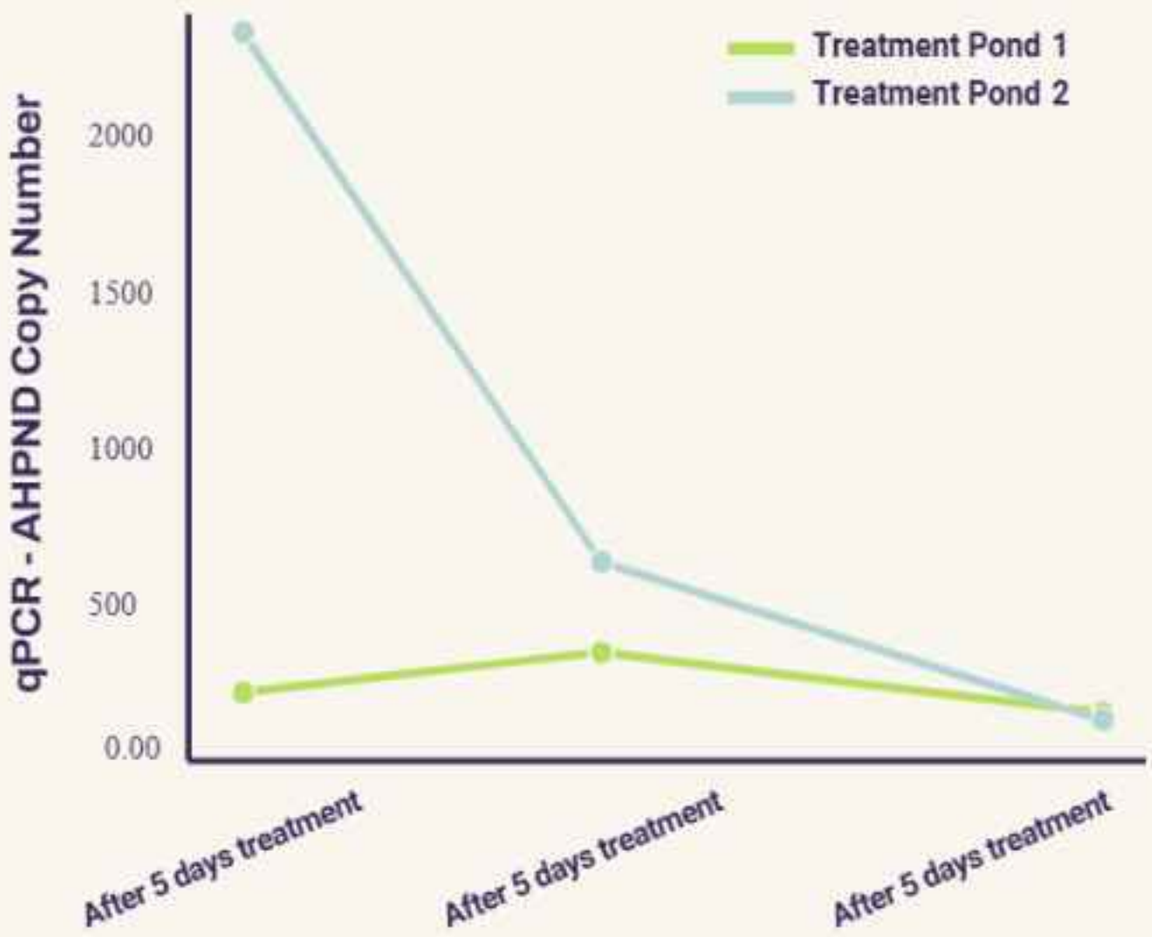
Initial detection: 426 copies at Day 0

Peak viral load: 1,216 copies at Day 5

Reduction: 501 copies by Day 10

Clearance: Not Detectable (ND) by Day 17

Assessment of Shrimpguard™ administered orally- Lab & Farm (Bacterial)



Day	Pond 1	Pond 2
D+5	2209.8	88.775
D+10	508	218.6125
D+17	0	30.11

BACTERIAL LOAD

Sharp reduction observed by Day 10

Near-complete clearance by Day 17

Results consistent across trials

SURVIVAL

Across trials, **average survival exceeded 85%** in ShrimpGuard™-fed groups. In lab viral challenge, untreated shrimp showed **near-total mortality,** while treated groups reached **93.3% survival.** On farms, survival improved from **85.3% to 91.5%, with no stress or feed disruption.***

VIRAL LOAD REDUCTION

ShrimpGuard™ helped reduce pathogen load across viral and bacterial challenges. In both cases, pathogen copies dropped significantly by Day 10 and were near or **fully cleared by Day 17**, supporting recovery and stabilisation during disease windows.

SAFETY

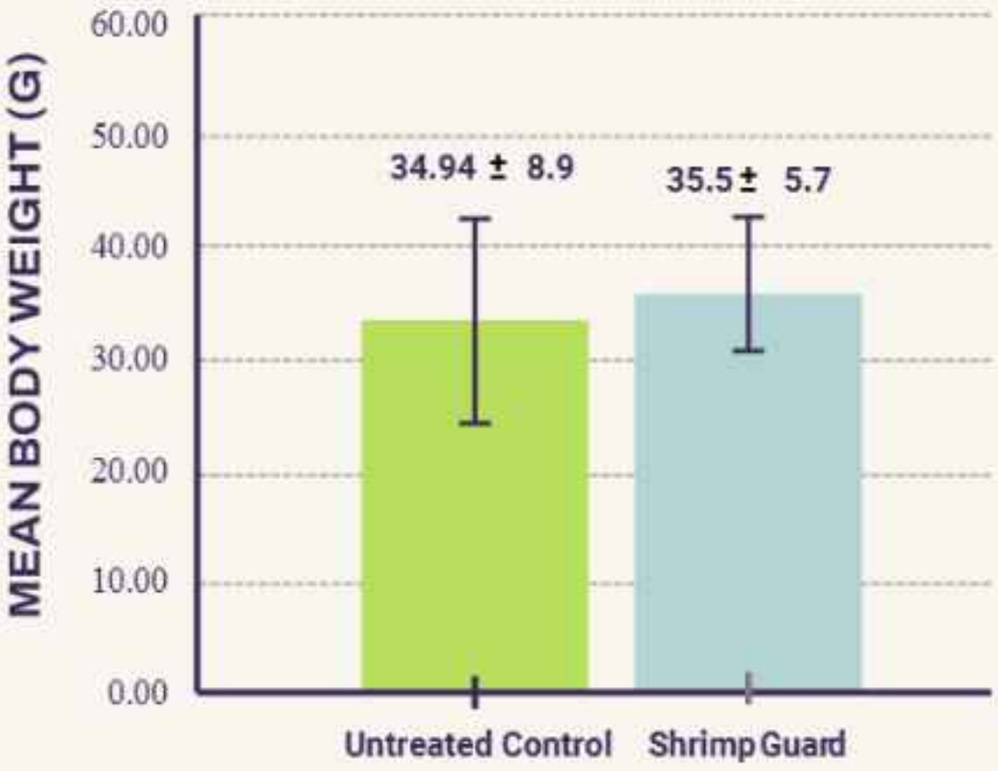
Zero mortality observed in oral safety assessments across laboratory and farm trials and **No negative impact** on growth, FCR, or average daily gain.

SUSTAINED IMMUNITY

Activated innate immunity within 10 days, with consistent upregulation of THC, ProPO, Toll, Crustin, and C-type lectins. Immunity sustained without affecting feeding or behaviour.

* In certain controlled trials, ShrimpGuard™ demonstrated up to 100% survival in treated groups, research paper available on request.

Mean Body Weight & Productivity Impact across treatment and Control Ponds



GROWTH, BIOMASS & PRODUCTIVITY PERFORMANCE

ShrimpGuard™ protected health without compromising growth or productivity, even during disease stress periods.

Mean Body Weight: 35.5 g (vs 34.9 g untreated)

Culture cycle: Extended; no emergency harvest required

Productivity: Maintained at commercial levels (~37.8 tons/ha)

FCR & ADG: No negative impact

Water parameters: Stable across trials

Shrimp remained active, fed normally, and sustained growth—confirming that ShrimpGuard™ delivers clean health protection without productivity trade-offs.

Across all trials, ShrimpGuard™ was proven 100% safe. It caused zero mortality in oral safety trials and showed no negative impact on FCR or Average Daily Gain, Shrimp stayed healthier through risk windows, confirming ShrimpGuard™ has a pure health benefit.

What It Means for Your Farm?

- Fewer mortalities → More harvests
- Cleaner shrimp → Better prices
- Less stress → Healthier ponds
- No antibiotics → No rejections

Current Shrimp Aquaculture Reality

- $75 billion global industry today, **$121 billion** by 2034
- **61.2% of global shrimp** now comes from aquaculture
- Supports **600 million** livelihoods
- Vaccination rate: **<1% in Shrimps**
- 70–100% mortality,Disease losses: **$15–20 billion**
- Antibiotic dependence: **80%= High AMR risk**
- Export rejections: **Rising**

With ShrimpGuard™

- Vaccine Like potential: **>80%**
- Prevented losses: ~**$15 billion**
- Reduced Mortality : **>85% survival**
- Export premium: **20-30%**

ShrimpGuard™ builds shrimp resilience before pathogens strike— No Injection, No Residues, No Stress and proven broad spectrum protection across viral, parasitic and bacterial challenges.

Built for immune readiness, it keeps farms protected— naturally, and proactively.

ShrimpTrident MYO

Farm Trial Overview

Pathogen-Specific Precision Intervention

IMNV causes severe muscle necrosis, sluggish growth, and high mortality in L. vannamei. Teora's ShrimpTrident Myo was designed to intervene fast—at the early signs of IMNV—before losses cascade. Farm trials across 4 countries validated its efficacy, safety, and practicality under real-world farm conditions.

FARM TRIALS

Safety & Efficacy assessment

Challenge: Direct IMNV injection (5.81E+05 copies/mL)

Dosage
1% feed inclusion post-infection

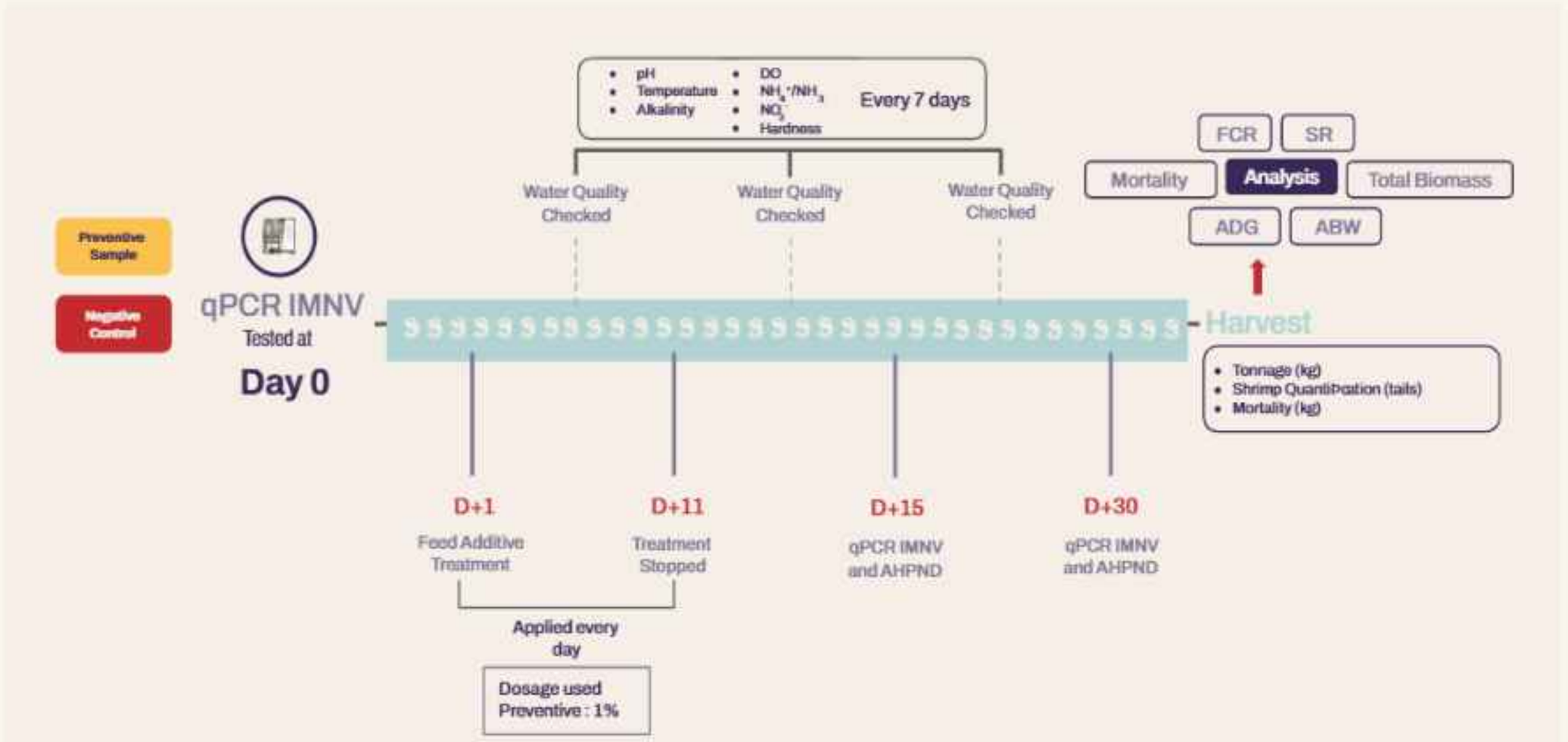
Administration method: Oral delivery with feed

Species/stocking: SPF L. vannamei, 6 shrimp per 10 L jar; 5 groups × 3 replicates.

Trial Type: Therapeutic Intervention Post-Infection

Experiment Design

Efficacy & Safety Trial — Farm

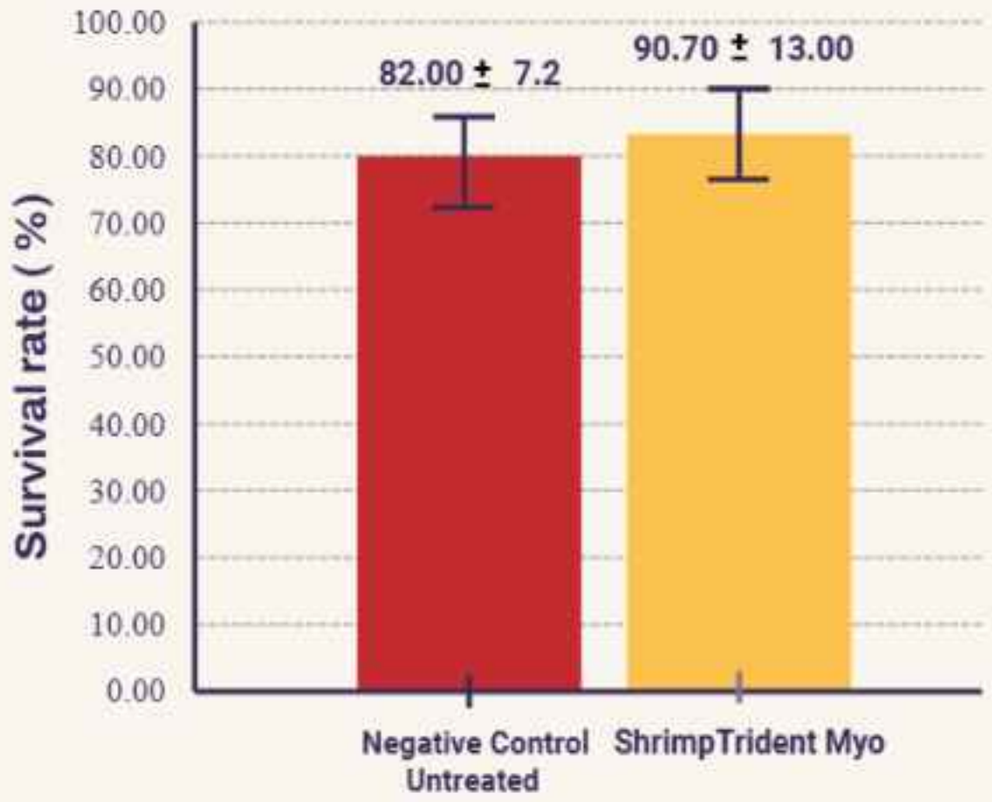


Safety assessment of ShrimpTrident Myo administered orally

S. No	Treatment ID	Survival Rate %	SD (at 20 days post challenge)
1	Negative control (untreated)	82	7.2
2	ShrimpTrident Myo treated - in IMNV infected ponds	90.7	13

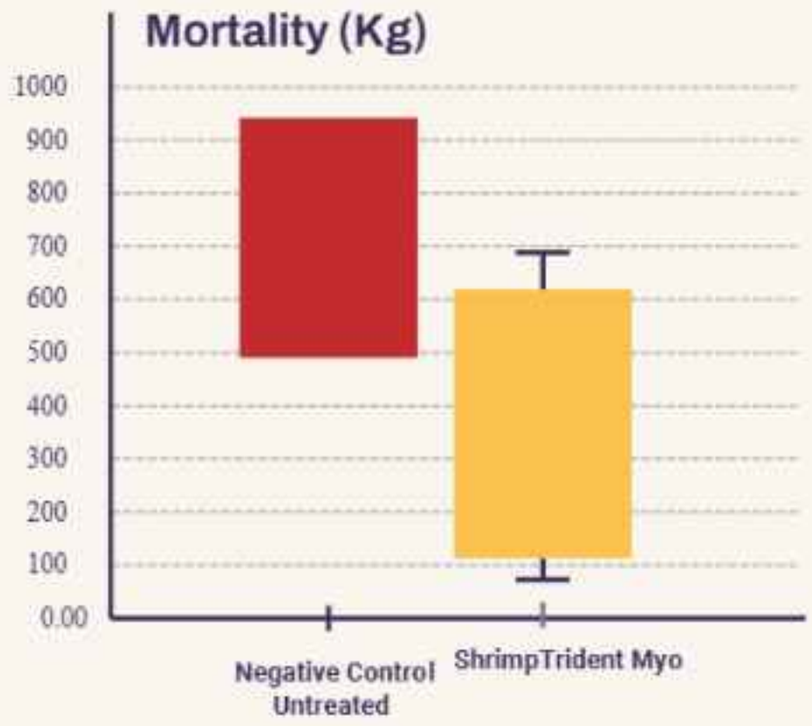
SHRIMPTRIDENT MYO

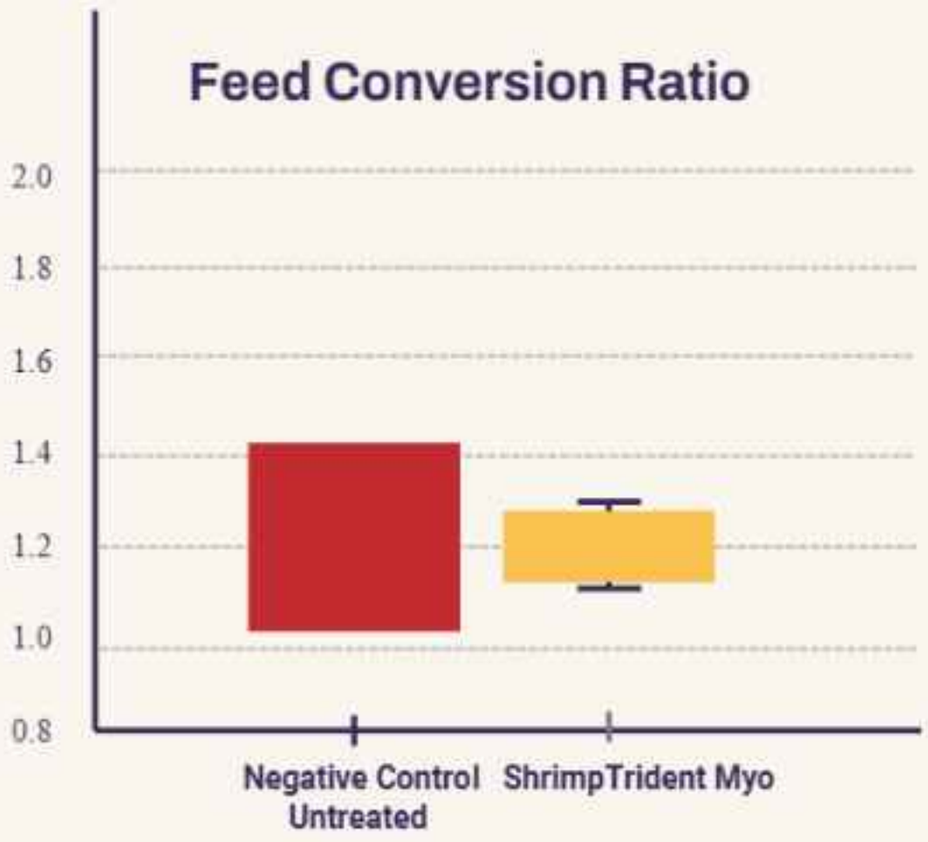
Farm Trial Outcome



SURVIVAL RATE

ShrimpTrident™ delivered rapid control of IMNV, **cutting mortality by 52.7%** and **raising survival by 18.1%**. Within 15 days, IMNV levels dropped to undetectable across all treated ponds.



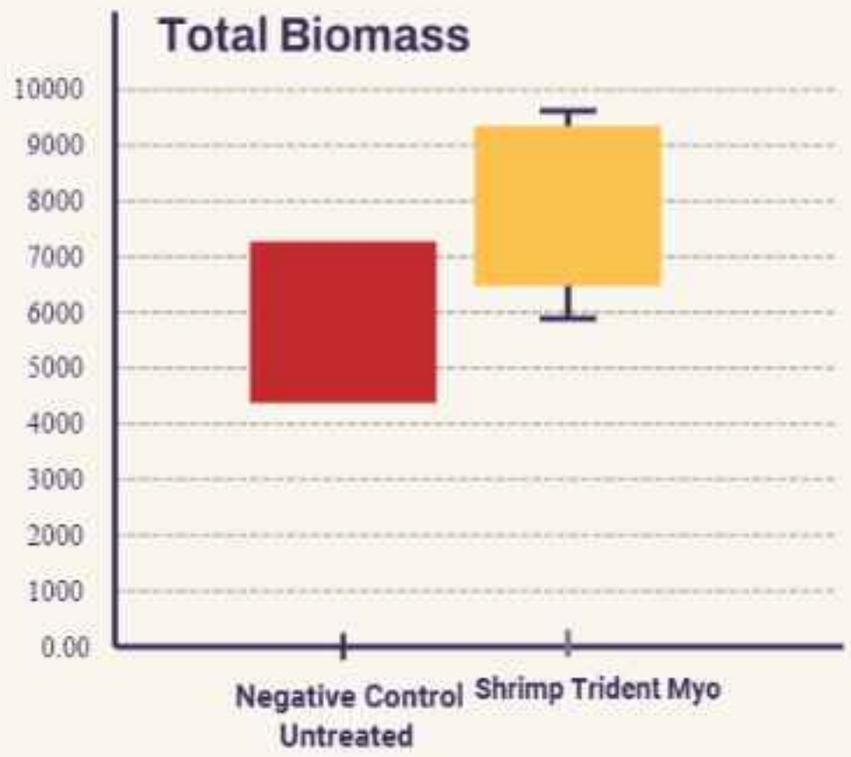


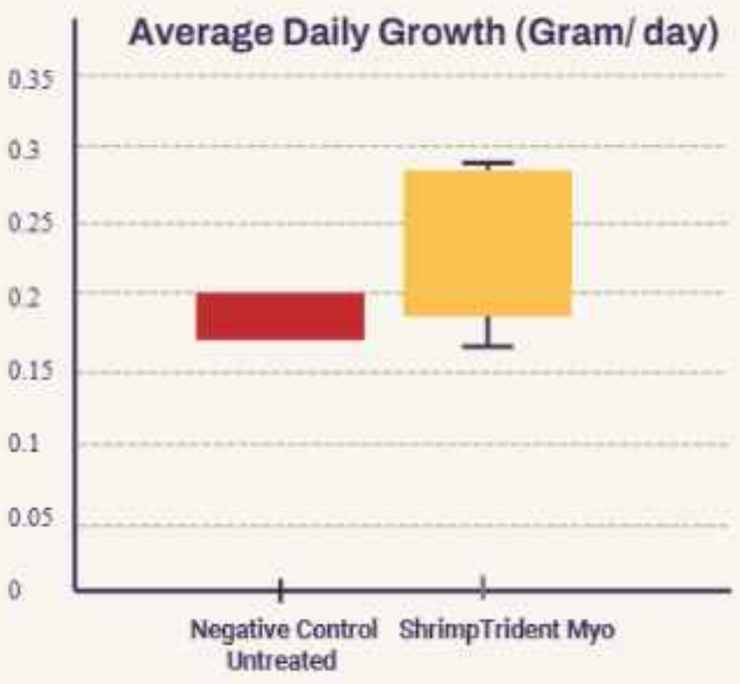
FCR IMPACT

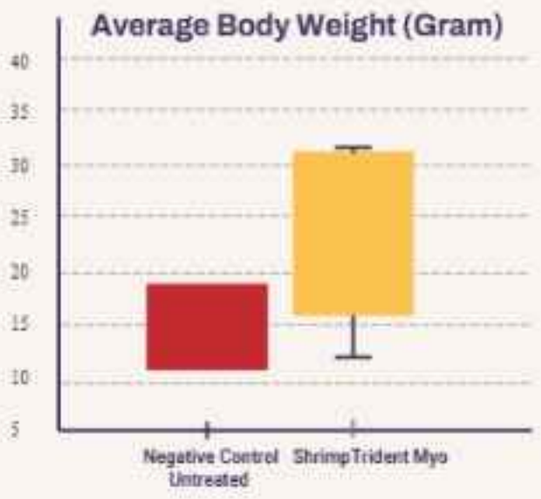
- Trident Myo maintained commercial FCR levels, despite disease pressure.
- **FCR remained stable**, unlike control groups where mortality led to spiked feed waste.

BIOMASS GAIN

ShrimpTrident™ Myo-treated ponds showed **43.8% higher total biomass** at harvest compared to untreated controls.







GROWTH

Shrimp Trident dose significantly improved **ADG and ABW by 55% and 131%** respectively compared to the negative control.

Teora Report 011 >>>

ShrimpTrident helps farms respond fast to Pathogens— with no injection, no antibiotics, and measurable survival & performance gains.

> **Built for real-time intervention, it gives shrimp a fighting chance—naturally, and on time.**

Clean feed-based Disease and health Management solutions for shrimp Farming by Teora

Product Line	Use case	Variant	Target Pathogens
ShrimpGuard™	**PROTECTIVE SHIELD** Broad-Spectrum, Feed-Based Immune Biologic for Proactive health, Early priming, Continuous immune readiness and disease resilience : ***Use proactively, before disease stress windows.***	ShrimpGuard™ Hatchery For Broodstock & PLs	Broad-spectrum- for both viral and bacterial infections in shrimp farms
		ShrimpGuard™ Grow-Out From Nursery to harvest	Broad-spectrum- for both viral and bacterial infections in shrimp farms
ShrimpTrident	Pathogen specific portfolio of precision feed based biologics that activates disease intervention, rapidly reducing pathogen loads enhances immunity and survival in shrimp farms at early detection : ***Use immediately after early detection or lab confirmation of disease.***	ShrimpTrident MYO Juvenile + Grow-Out	IMNV (Infectious Myonecrosis Virus)
		ShrimpTrident SPOT Juvenile + Grow-Out	WSSV (White Spot Syndrome Virus)
		ShrimpTrident VIB Juvenile + Grow-Out	Vibrio spp.
		ShrimpTrident EHP Juvenile + Grow-Out	EHP (Enterocytozoon hepatopenaei)
Custom Solution	Custom pathogen specific solutions and protocols can be developed.	Available on Request	Mixed pathogen risk depending on your farm challenges.

This isn't just about saving shrimp—it's about saving livelihoods, securing food systems, and building a sustainable future for aquaculture.

Our goal is simple—to future-proof farmed food production without sacrificing sustainability, profitability, or global health.

SUSTAINABILITY

FOOD SECURITY

SAFETY

1

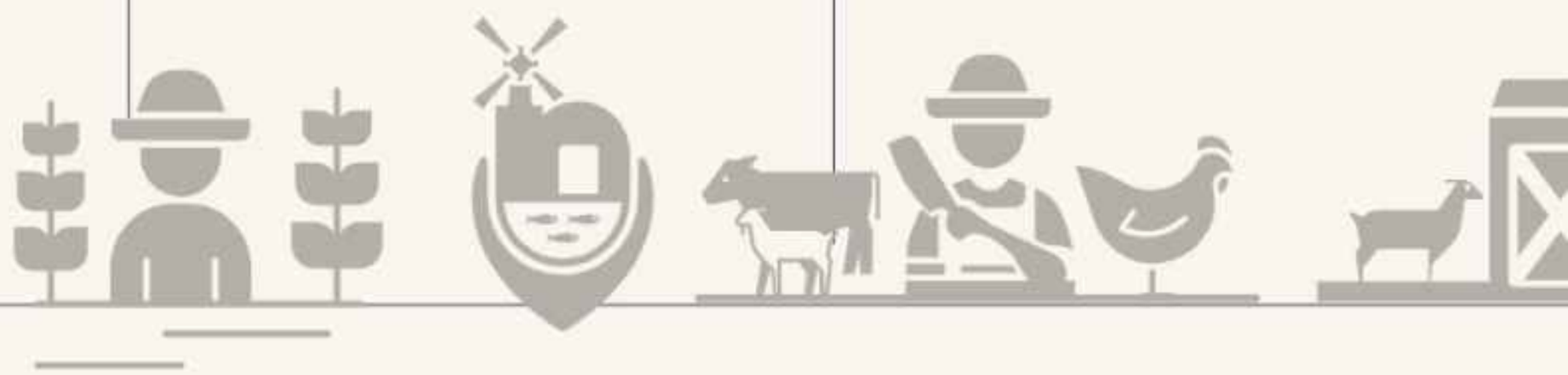
FIRST RIPPLE: FARMERS

- Income can double through higher survival; costs drop as you move away from expensive unsustainable health solutions
- No export rejects
- Less waste due to disease losses

2

SECOND RIPPLE: CONSUMERS

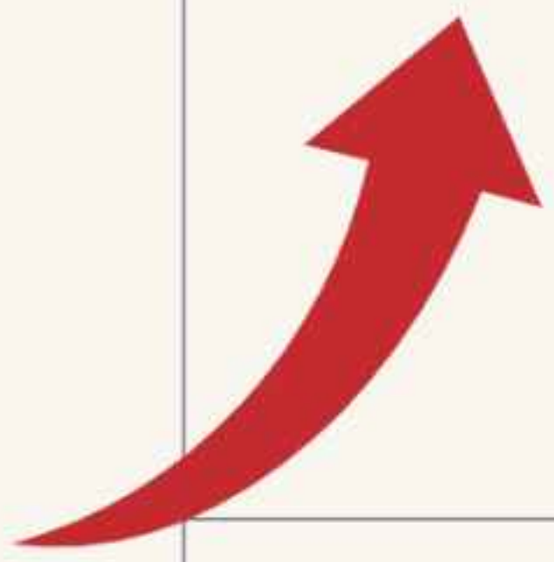
- Antibiotic-free protein
- Chemical free Food
- Traceable, safe food
- Nutritious, clean eating



Disease, Health And Growth Solutions Available For

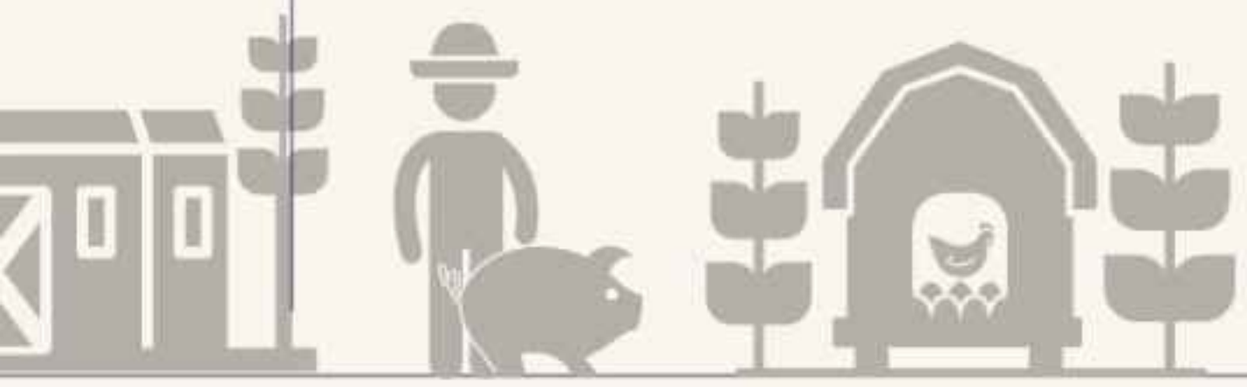
Shrimp Aquaculture
Fish Aquaculture
Livestock
Poultry
Crop Agriculture
Companion Health

3



THIRD RIPPLE: PLANET

- Less chemical runoff
- Biodiversity restored
- Carbon footprint reduced
- Water systems cleaned



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FOURTH RIPPLE: HUMANITY

- AMR crisis averted
- Less Farmer suicides
- Many lives saved
- Food security achieved
- Food safety-Future protected

EFFECT

PARTNER WITH TEORA TO

Save billions in annual disease losses

Prevent AMR deaths & Produce clean

Feed 10 billion people sustainably

Create the future of farming profitably

Also Available: Feed-Based Biologics for Fish Health.

- Viral, Parasite & bacterial disease support
- Broad Immune readiness across species
- Enhanced Growth performance naturally

Validated across multiple finfish species including Tilapia, Seabass, Trout, Salmon and others.

Request the Full Aquaculture Product Brochure Email us : Rishita@Teora.life

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No matter your size, sector, or species—if you‘re farming and feeding, we’re ready.

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