



BiOWiSH®의 미생물 관리 프로그램으로 생산성을 향상시키세요

BiOWiSH®의 미생물 솔루션을 통해 문제를 해결하고 생산
량을 더 증대시킬 수 있습니다.

control your biology. control your production.



biowishaquaculture.com

Aquaculture's Greatest Challenges

FAO에 따르면 2030년까지 세계 어류의 생산과 소비, 무역이 증가할 것으로 예상됩니다. 그러나 이를 위해서는 업계에서 아래의 가장 큰 과제를 해결해야 합니다:

- 관련 질병의 증가
- 수질 악화
- 생산 밀도의 증가
- 열악한 생물안전성
- Access to certified, disease-free broodstock
- Seed (post-larvae) stock quality and availability
- Rising production costs

The challenge in addressing these issues is that they are all interconnected. The answer to these problems is anything but simple. Farmers need a microbial management program to follow in order to overcome these challenges and meet production goals.

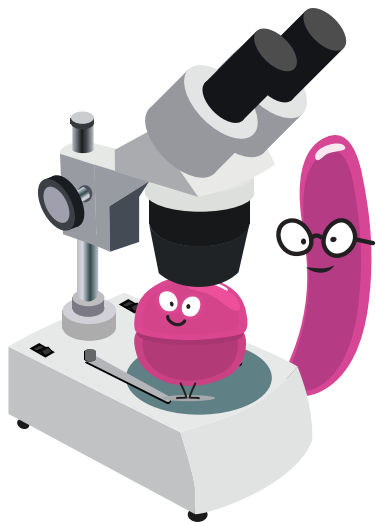
Who is BiOWiSH?

BiOWiSH Technologies provides industry-leading biotechnology solutions for the aquaculture industry. Through years of research in the lab and in the field, we have developed and refined our microbial management program.

What is the Technology?

BiOWiSH® biology is produced in a proprietary fermentation process that reliably and consistently induces a range of a desirable phenotypic profiles in each organism, overcoming limitations of earlier generation biological products.

Designed for the aquaculture industry, our biology uses multiple modes of action to perform consistently in all stages of fish and shrimp production. From hatcheries through grow-out ponds, our full range of microbial solutions work together to help aquaculture producers control their farming environment.



Our Microbial Management Program

Our aquaculture microbial management program is an essential tool to improve aquaculture productivity and production.

Farmers who use our program gain the ability to prevent, control, and manage issues throughout the production cycle. Our experts used these five elements to build the program. Many of their recommendations are available at biowishaquaculture.com/documentation.



Pond Preparation

- Odor
- Organic waste
- Ammonia concentration



Water Management

- NH_3
- NO_2
- Other water quality parameters



Feed Management

- FCR
- Production costs
- Gut health



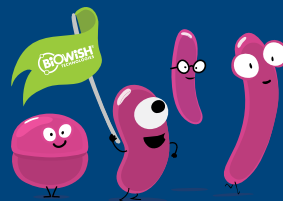
Issues Management

- Broodstock quality
- Biosecurity
- Disease pressure



Waste Handling

- Discharge & effluent quality
- Odor

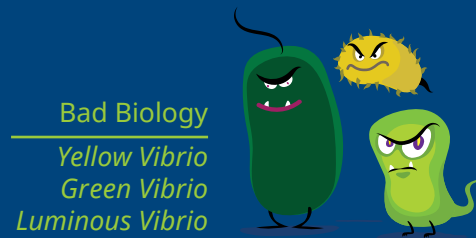


Good Biology

Lactobacillus
Pediococcus
Bacillus

Make Biology a Priority

- Good biology multiplies slower than bad bacteria but once it colonizes it can help suppress bad bacteria
- Bad bacteria cause disease outbreaks and reduce survival rate
- Farmers whose ponds have good biology get successful harvests, higher quality animals, and increased profits



Bad Biology

Yellow Vibrio
Green Vibrio
Luminous Vibrio



BiOWiSH® AquaFarm

BiOWiSH® AquaFarm is a powerful microbial blend that improves water in aquaculture systems by accelerating the removal of nitrogenous wastes and promoting good water biology.

Benefits

- Increases survival rate, growth rate, and weight of shrimp and fish
- Improves water quality by reducing and preventing the buildup of nitrite, ammonia, and hydrogen sulfide
- Helps prevent the growth of pathogenic *Vibrio* bacteria in the water, resulting in less disease and healthier shrimp
- Accelerates the decomposition of pond bottom sludge and minimizes suspended organic solids in the water
- Reduces odor of sludge and water
- Reduces labor and associated costs for pond treatment
- Increases quality of shrimp and fish, increasing economic value

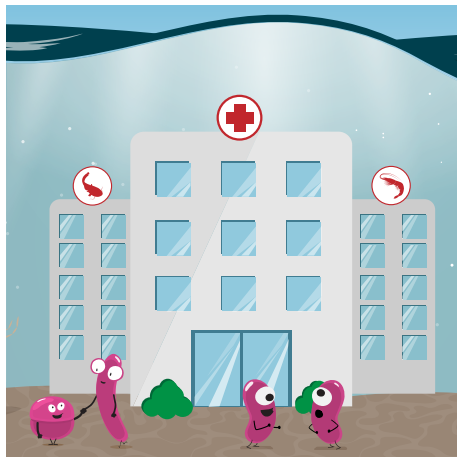
Did you know...

During earlier stages of development (zoea, mysis, PL 1-5), the microbiota of shrimp is a factor of the microbial ecology of the environment. However, after PL5 their microbiome starts to differentiate from the environmental microbial ecology, making probiotic feed supplementation a valuable strategy to improve performance.

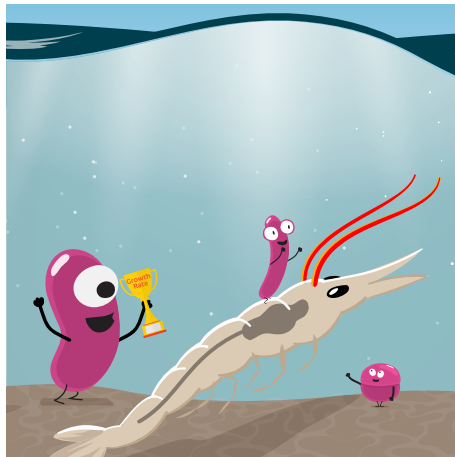


BiOWiSH® Biology Works Hard to Help You Control Your Production

Meet Bacilly! Bacilly is our star *Bacillus* and he can only be found in BiOWiSH® products. He and his friends work together to improve water quality and help perfect shrimp growth.



Our biology inhibits *Vibrio* and other pathogenic bacteria to help prevent disease and increase survivability.



BiOWiSH® microorganisms improve the growth rate and overall quality of shrimp. Ultimately, this means more profits for your farm.



Adding BiOWiSH® to your pond water improves the quality by reducing and preventing the buildup of nitrite, ammonia, and hydrogen sulfide.

Economic Impact

Reduce Your Expenses

Feed is one of the largest production costs for all aquaculture species. BiOWiSH® MultiBio 3PS improves feed efficiency and FCR, which means that farmers can reduce feed costs without reducing nutrition availability.

Aquaculture farmers also incur expenses associated with the quality of the pond water such as labor costs and chemical water treatments. Because BiOWiSH® AquaFarm improves water in aquaculture systems, farmers can reduce labor costs and chemical treatments used to maintain pond water quality.

Increase Your Sales

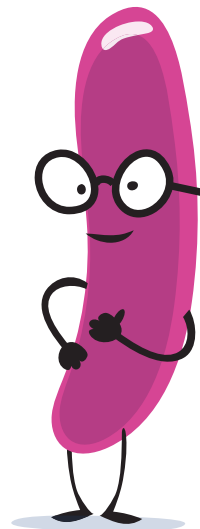
Easy to use and highly effective, BiOWiSH® products have many benefits that can lead to more sales. By following our microbial management programs, farmers can ensure that a greater number of shrimp or fish survive until harvest. Additionally, the combination of a healthy gut and good water means that crops reach harvest size in a shorter period of time. This way, farmers can quickly make more sales and more profits.

Protect Your Investments

Many pond bottom soils and liners are home to pathogenic and toxic substances which can partially reduce crop yield or wipe it out completely. BiOWiSH® AquaFarm helps prevent *Vibrio* buildup so that crops are more likely to survive to harvest.

Another way to protect crops is by using BiOWiSH® MultiBio 3PS. The beneficial microbes improve gut health which prevents pathogen accumulation and subsequent crop loss.

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Biological Solutions for Aquaculture
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