### **All About Shrimp**



Small farms as far as the eye can see in rural Vietnam. This production model is changing in favor of that below (lined ponds) as farmers begin to understand that proper biosecurity is critical for sustainable production.

Aquaintech Inc. is entering its 24th year and we wanted to reach out to our many clients with a big "Thank You".

Each edition of the "All About Shrimp" newsletter will deal with a different topic. We are starting with a once a month edition which will increase as resources and interest dictate. Depending on the topic, there will be a variety of links that are intended to educate. The goal is to help you, the readers, to better appreciate the role of science in your activities.

Sustainable production depends on the use of science based production methods. Buying our products ensures that we can continue to provide you with new science based tools, available at fair prices and that work.

### **WAS New Orleans**

Dr. Newman and his son, Matt, just attended the triennial meeting of the World Aquaculture Society in New Orleans, USA (March 2019). The meeting was very well attended with a wide variety of talks given and the usual trade show players. Clear that interest in aquaculture is growing.

Unfortunately, not all of this is in the best interest of the producers.

Dr. Newman gave a presentation on disinfectant use in aquaculture (as it relates to biosecurity). The presentation can be found at this link:

WAS 2019 Presentation



Lined ponds Vietnam right next to the Ocean

### Aquaintech Inc.

Founded to develop and sell a non-specific immune stimulant for farmed shrimp in 1996, Aquaintech Inc. is focused on helping farmers understand the issues that affect them and offering field proven tools to lessen the impact.

Currently we offer a wide range of microbial products for the degradation of organic matter. More detail in the links and below.



www.aqua-in-tech.com

## White feces and what can you do about it?





Aquaintech Inc. sells a variety of microbial products for the degradation of organic matter. Clients have noted many benefits, including:

Reduced vibrio loads in hatchery tanks and farm ponds

Reduced blue green algae loads

Reduced ammonia levels

Reduced hydrogen sulfide levels

Much cleaner pond bottoms throughout cycle and at harvest

Cleaner shrimp at harvest

Less fouling issues

In some cases, higher survivals\*

\* Note that claims of increased survivals must be accompanied by statistics. There is so much variability between ponds that it is easy to claim that these products increase survivals based on cherry picking data.

### White Feces Fact Sheet

This is a summary of what is in the literature and what was gathered from talking with researchers in the field.

At this time the exact cause of the disease is not known. It appears to be bacterial although more than one genus has been implicated. Efforts for control should focus on lessening organic matter accumulation and better biosecurity in the hatchery.

White Feces Fact Sheet

### A PRIMER on probiotics for shrimp.

Probiotics are defined (by consensus and the FAO) as living organisms (typically bacteria although fungi and others are included) that are fed to an animal. They colonize the animals intestinal tract, change the microbiome and impact the animals health.

These do not exist for shrimp despite claims to the contrary. Production environments are not controlled and the literature clearly shows that what is in the shrimps (or fish) microbiome is consistent with what it in their environment and that it is constantly evolving. This link takes you to a relevant paper.

# Microbiome manipulation in shrimp: fact or fiction?

The link at the bottom of the newsletter will take you to our web site outlining our products for bioremediation.

Some of what we have learned over the years:

*The Myth:* Many of our competitors would have you believe that very high spore counts are what you need.

The Reality: There is no relationship between spore counts and how well the product works. Most of the spores never germinate. How many do and how well they grow depends on nutrient loads.

*The Myth:* The more strains the better.

The Reality: Various strains germinate at



We sell our product in many forms.

- Tablets of many different sizes, 1, 2, 3, 5, 10, 16, 50 grams.
- In biodegradable bags-a Power Pack (Aquapro EZ) for those who want the ease of throwing product into bodies of water. Widely used in lakes.
- As a powder for incorporation into feeds (Aquapro F) or for grow-out (Aquapro B).

different times. Those strains that germinate the earliest dominate. Those that germinate later are entering a nutrient limiting environment. Blending spores with vegetative cells (such as Lactobacillus strains, yeast, fungi, etc.) can result in products with short shelf lives as the vegetative cells die off.

*The Myth:* There is one best way to use these products.

The Reality: Each environment is different and the optimum approach towards using these products and getting the best benefit is to use them frequently.

Aquaintech Inc. sells its product lines at considerably lower cost than competitive products. We do this to allow the end user to explore the best use of the product. We are committed to helping farmers become more productive, not to making money off of them by selling products that cannot be used in the best possible manner.

Our next edition will focus on control of vibrios in hatcheries and production ponds.

www.probioticsaquaculture.com