

Specificity of Probiotics in Aquaculture: Synonymous with Efficiency and Technology.

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In shrimp farming around the world a good production is directly related to environmental quality of water and soil, to animal health and to feed intake.

In all countries intensification has been the option to increase profitability but with time we have learned that this system is not sustainable if doesn't use proper technology and infrastructure. In most countries the industry has collapsed in different stages due to poor environmental conditions and the appearance of viral infections. Once established viral mortality is accentuated by secondary agents that stress, intoxicate or make the animal sick.

Probiotic technology has advanced a great deal by developing specific mixtures of microorganisms with different targets such as water quality, soil quality and gut protection. Each bacterial strain has a different mode of action. Probiotics use mixtures of strains to create a synergistic effect among the strains selected for each target.

With this technology available, the key issue for farmers is to identify in their system and individual ponds the critical points that trigger mortalities. With advice from experienced probiotic manufacturers and sellers they can counteract mortality triggers with different probiotic alternatives that can take the stress generator out of the system or minimize its impact.

The objective of this paper is to discuss all of these factors, critical points in shrimp farming, infrastructure needs, biosecurity levels and the specificity in the use of probiotics in shrimp farming.