Phage Therapy Application for Biological Control Phathogens in Aquaculture

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Abstract:
Aquaculture industry is very important to produce nearly one-third of the world's seafood supplies. One of the biggest problems in this industry is infectious bacterial disease, which effect livelihoods of communities causing heavy financial that production loses and a subsequent decrease in food availability. Bacteriophages are a heterogeneous group of viruses in terms of phenotype, genotype, and host range that can be used as a bio control agent. Phage therapy may represent a viable alternative to antibiotics to inactivate bacteria, the main pathogenic agents in the aquaculture industry. The use of phages to control infections, such as fish diseases, in aquatic environment, seems to be particularly promising. In this research, bacteriophages isolation from water of Fish breeding pools and effect of this bacteriophages was studied on three pathogens (*Streptococcus iniaie, Yersinia rukeri and Aeromonas hydrophila*) in Rainbow trout and the results showed that bacteriophage was able to kill the *Aromonas hydrophila.*

Keywords: Phage Therapy, biological Control, Phathogens, aquaculture