

Abstract

The past two decades have seen great intensification of the aquaculture industry. Currently aquaculture production accounts close to 50% of the consumption of fish worldwide. This substantial growth in the aquaculture sector is greatly attributed by the increase in fish demand, declining fisheries, improved technologies among others. To meet this demand, there have emerged intensive culture practices which are associated with both an uncontrolled use of feed and a massive production of waste. For this reason, the aquaculture industry is currently considered to produce an adverse and negative impact in the environment. Most governments have establishmentstrict regulations dealing with the discharge of untreated aquaculture wastes to the environment. Given the risks associated to the use of antibiotics in general and in fish farms in particular, bioremediation therefore remains the most health and efficient way of treating aquaculture waste. Several studies have identified microorganisms as the paramount bioremediators, as they are able to completely remove the wastes generated by the fish-farm facilities. This paper reviews several concepts under which micro-organisms bioremediate aquaculture wastes.