The antibacterial activity of strains isolated from *Epinephelus coioides* in Deylam seaport of Bushehr province

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Abstract
The purpose of this study is to evaluate the antibacterial activity of potential probiotic bacteria of *Bacillus* and *Lactobacillus* isolated from the digestive tract of *Epinephelus coioides* against two of marine pathogenic bacteria (*Vibrio harveyi* [ATCC:700104], *Elizabethkingia meningoseptica* [ATCC:33953T]). Therefore, 15 young and healthy *E.coioides*, were hunted from in Deylam seaport in spring 2013, were selected, and aseptically, some pieces from different parts of their digestive system were cut and sampled. After culturing in specific media of *Bacillus cereus* agar and MRS agar, performing biochemical tests related to diagnosis of *Bacillus* and *Lactobacillus* genus and isolation, purification and coding of different bacterial strains, the *in vitro* antagonism test was performed by disc diffusion method in order to find effective probiotics. The findings indicated that eight bacterial strains candidate for probiotic properties had inhibitory effect on marine pathogens and regarding the inhibitory diameter of growth zone, bacterial strains candidate for probiotic properties could prevent the growth of pathogenic bacteria roughly as 1 to 2.6 cm.

Keywords: Antagonism activity, *Bacillus* and *Lactobacillus, Epinephelus coioides*.