



University of Zabol
Graduate School
Faculty of Veterinary
Department of Pathobiology

**The Thesis Submitted for the Degree of Master of Science
(In the field of Veterinary Bacteriology)**

Title:

**Antibacterial effect of *Padina* seaweed on bacteria isolated
from shrimp breeding center in Chabahar**

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Abstract

Vanami shrimp is very susceptible to vibriosis. The purpose of this study is to identify the agents that cause vibriosis in Vanami shrimp at the shrimp breeding center in Chabahar through biochemical and molecular techniques and to develop a method of biological control of the disease using algae extracts. shrimp Post larvae samples were collected from shrimp breeding tanks and bacteria were isolated from those samples. Based on phenotypic identification, several isolates were identified as *Vibrio* sp. 16S rRNA gene sequences of selected isolates showed 100% homology with *V. alginolyticus* strain. Macroalgae extracts were screened by ethanolic, methanolic and Aqueous extract methods on the growth of *V. alginolyticus* in laboratory conditions. In vivo conditions, ethanolic and methanolic extracts of *Padina* macroalgae showed an inhibitory effect on *Vibrio alginolyticus* bacteria. This is the first report on the molecular identification and biocontrol of *V. alginolyticus* in shrimp in Chabahar.

Keywords: *Vibrio alginolyticus*, reproduction center, *Padina* macroalgae, ethanolic extract, methanolic extract