

ABSTRACT

The survival of *Vibrio harveyi* in red tide infested water was determined. The physico-chemical characteristics were measured. Luminescent bacteria were isolated from the squid (*Loligo sp.*) and identified using cultural, morphological and biochemical characteristics. Results showed that the physico-chemical characteristics of the water sample conformed with the normal condition of the sea water. It was further established that red tide infestation was not observed. A concentration of 0.05 mg/L was added in order to simulate the condition of red tide infested water. The luminescent bacteria isolated from squid conformed with the characteristics of *Vibrio harveyi*. The isolated *Vibrio* was subjected to 0.05 mg/L Trisodium phosphate and the densities were measured everyday for four days. In the survival studies, the growth of *Vibrio* on red tide infested water showed a significant decrease due to the phosphate salt that influenced the poor water condition.

