

**Abstract:**

Reproductive and culture shrimp industry in the southern coastal line of Iran, due to white spot syndrome, external market sluggish, and internal market low production had a severe recession at the last decade. Occurrence of red tide in the waters of Persian Gulf and Oman Sea caused that some of shrimp farmers had fear from stocking of shrimp at 2004. The cause of red tide was an alga, *Cochlodinium polykrikoides*, caused death of fish and other aquatics. It was feared that the same damage brought on the shrimp pound. Regarding to the risks of *C. polykrikoides* blooms in Persian Gulf waters and matter of shrimp industry in the country and fear of farmers from hazards of bloom, this project has done. The purpose of this study was to study the effect of different concentrations of *C. polykrikoides* (20000, 600000, and 2000000 cell/l) on the growth and survival of shrimp larvae during a 35 days culture period in lab tanks. In this regard, the 40-liter tank was used for tests, within each of the 10 pieces of post larve were reared, Based on the density of the algae was added to the water. In the period of food rations to hand starter blind feed shrimp used to feed post larve.

The results of the study show that children raised shrimp from the beginning to the end of the period, thanks to the growth of algae *Cochlodinium* were in good condition, In addition, the use of algae as food and feed were manually and algae in addition to causing casualties *Cochlodinium* no adverse effect on the appearance of a shrimp not post larve.

**Keywords:** *Litopenaeus vannamei*, *Cochlodinium polykrikoides*, Hormozgan, growth rate