Study of the growth of microalgae chlorella sp in Conway and TMRL in different water

Shabnam Bagheri¹ Seyedeh Zahra Masoomizadeh^{2*}

- 1. M.Sc. Student of Aquaculture, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran
- 2. Department of Aquaculture management, Ahvaz Branch, Islamic Azad University, Ahvaz, Iran
- *Corresponding author: zmasoomi@yahoo.com

Received date: 2015/04/09 **Reception date:** 2016/01/15

Abstract

Chlorella is a green and photosynthetic algae that are very important in the aquaculture industry. Conway is very wealthy more than TMRL and wastewater has many nutrients such as nitrate and phosphate. Therefore, to perform this test; growth of microalgae chlorella in 2 types Conway and TMRL in 3 types waters (marine water, sterile wastewater and no sterile wastewater)was studied. The growth of this micro algae studied in 6 treatments and 3 repetition for each treatment. Microalgae commutated daily and accounted equal condition (temperature: 25°C, salting: 5 ppt, lighting rage: 2500 lax, lighting period: 16:8). The results showed that there is a significant difference between the treatments. Maximize density was TMRL treatments in sterile wastewater and minimize density was no sterile wastewater. The results showed that marine water is grown rather than other treatment, whereas TMRL in sterile wastewater grown rather than Conway, so, given that sewage has many nutrients such as nitrate and phosphate, can cause growth of many algae as well as wastewater treatment.

Keywords: Chlorella, Aquaculture, Wastewater, Microalgae.