

**THE EFFECTIVE USED OF LIQUID ORGANIC FERTILIZER  
AS THE CULTURE MEDIA OF POPULATION'S  
GROWTH *Chaetoceros calcitrans***

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**ABSTRACT**

This research was conducted at Brackish Water Aquaculture Situbondo Laboratory. To know the effect of using liquid organic fertilizer that used as culture media of *Chaetoceros calcitrans* growth and to know the best concentration of liquid organic fertilizer in increasing the growth of *Chaetoceros calcitrans*, those are the purpose of this research. This research was used experimental designs. The method that used was a Complete Random Design (RAL) with 4 treatments and a concentration of 0 ppm, 40 ppm, 50 ppm, 60 ppm, for each treatments was doing repeatedly in three times. A significant parameter of this research including the density and rate of population's growth. The results, based on the calculation of ANOVA states proved that the provision of liquid organic fertilizer concentration highly has significant effect ( $F_{\text{count}} > F_{\text{table}} 1\%$ ) for the growth of *Chaetoceros calcitrans*. The highest level of *Chaetoceros calcitrans* density growth with a concentration that is 60 ppm which showed as the highest density of  $411.33 \times 10^4$  cells/ml and the highest population's growth that is 5,92 cells/ml, while the lowest level of *Chaetoceros calcitrans* density shown with a concentration = 0 ppm cells/ml that is  $279 \times 10^4$  cells/ml and the lowest population's growth that is 5,29 cells/ml.

*Keywords: Liquid Organic Fertilizer, growth, Chaetoceros calcitrans.*

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