ABSTRACT

*Chlorella vulgaris*, is a biological resources that have been used for feeding shrimp larvae and in this recent used for food supplement. The addition NPK fertilizer can increase cell density in short time so production of *Chlorella vulgaris* as natural fed can be obtained. The purpose of this research is to know the influence of concentrates NPK fertilizer for relatively growth rate *Chlorella vulgaris*. The concentrates of NPK fertilizer used are 0 ppm, 30 ppm, 35 ppm, 40 ppm, 45 ppm and 50 ppm respectively with three time replicate. The design of this experiment use in completely randomized design. Analysis for data used by anova and continued by LSD test. Experiments has been done at Biology Laboratorium for Program Studi Biologi ITS. The result of experiment indicates that concentrate NPK 35 ppm with highest relatively growth rate *Chlorella vulgaris* 1,5816 cell / ml / day on 2nd day.

Key words : NPK fertilizer, relative growth rate, *Chlorella vulgaris*