

## ABSTRACT

### THE PROFILE OF INORGANIC NITRATE AND INTRACELULLER CRUDE PROTEIN ON *Nannochloropsis* sp. LAG PHASE

By

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*Nannochloropsis* sp. is a natural feed with a high intraceluller crude protein content. Inorganic nitrate fluctuation influenced the intraceluller crude protein and *Nannochloropsis* sp. growth. The aim research was know correlation of inorganic nitrate changing to the the intraceluller crude protein and lag phase of growth *Nannochloropsis* sp. on different inorganic nitrate consentration. The research done on January 13 – 21, 2014 at Laboratory of Aquaculture, Aquaculture Department, Faculty of Agriculture, University of Lampung. The research consists of two treatment and was done in triplicate. Those were treatment A ( $\text{NO}_3^-$  100%) and treatment B ( $\text{NO}_3^-$  50%). The main parameters analyzed cell density and intraceluller crude protein by analyzes t – test. The increasing of of P/ Nt ratio was 10,424%; while increasing of P/  $\text{NO}_3^-$  ratio was 42,647%. T test showed that the increasing and deficiency in inorganic nitrate effected cell density but has not effected on intraceluller crude protein content *Nannochloropsis* sp.

Keywords : Inorganic nitrate, intraceluller crude protein, lag phase, and *Nannochloropsis* sp.