

# **THE EFFECT OF CONCENTRATION FERTILIZER LEAF OF HUMMINGBIRD TREE (*Sesbania grandiflora*) TO THE POPULATION AND BIOMASS OF *Spirulina platensis***

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## **ABSTRACT**

*Spirulina platensis* is a group of blue-green algae, which is one source of life feed. *S. platensis* also used by humans for food additives or nutritional supplement because it has equipped. High on *S. platensis* demand needs require businesses to increase production by culturing *S. platensis*. The current culture of *S. platensis* using Walne fertilizer. Walne fertilizer is a fertilizer made from synthetic material and has a relatively high price, and therefore needed a replacement fertilizer alternatif *S. platensis* using organic for example leaf of hummingbird tree (*Sesbania grandiflora*). The purpose of this study are to determine the effect of the addition of fertilizer and concentrations leaf of hummingbird tree to the population and biomass of *S. platensis*. This research method is experimental, while the design of the study is a Rancangan Acak Lengkap (RAL) with 6 treatments and 4 replications. The results suggest that concentration fertilizer leaf hummingbird tree as much as 1 ml/L that produces the highest population *S. platensis* (90875.79 unit/ml) and the highest biomass *S. platensis* (6,2 gram/L) on the sixth day.

**KEYWORDS : *Spirulina platensis*, Population, Biomass, Fertilizer Leaf of *Sesbania grandiflora***