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 alternaltif 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