

**THE IMMERSION EFFECT OF *Spirulina platensis* EXTRACT ON  
HEPATOPANCREAS OF CARP FISH (*Osphronemus gouramy*)  
THAT INFECTED *Aeromonas hydrophila***

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**ABSTRACT**

The aim of this research was to study the positive effect of *Spirulina platensis* extract immersion on histopathological of carp's hepatopancreas that infected by *Aeromonas hydrophila* in  $10^6$  cell/ml concentration. Twenty carps with average weight of 25 grams were divided into five (n=5) group of treatments, including P0, P1, P2, P3, and P4. Dipping method was used in this research for three hours by four different concentration of *Spirulina platensis* extract which were 0 mg/L (P1), 200 mg/L (P2), 400 mg/L (P3) and 600 mg/L (P4), while P0 used as control. After 24 hours post dipping method, all group of treatments without P0 were infected by *Aeromonas hydrophila*. The clinical signs from infection appeared in 96 hours. The result showed that the infected carps swam abnormally close to aeration, exophthalmos and haemorrhagi in skin. Histopathological showed degeneration, necrosis and inflammation of hepatopancreas. The result were analyzed by Kruskal Wallis Test, followed by Mann Whitney Test and it showed that *Spirulina platensis* extract had ability to decrease histopathological of carp's hepatopancreas.

**Key words :** *Spirulina platensis* extract, hepatopancreas, *Aeromonas hydrophila*, histopathological, carp fish, *Osphronemus gouramy*