

THE EFFECT OF *Spirulina platensis* EXTRACT IMMERSION AS IMMUNOSTIMULANT TO INTESTINE HISTOPATHOLOGY OF *Aeromonas hydrophila* INFECTED GOURAMY (*Osphronemus Gouramy*)

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ABSTRACT

The aim of this study was to assess the immunostimulant potential of *Spirulina platensis* extract on intestine histopathology of gouramy (*Oshpronemus gouramy*) infected by *Aeromonas hydrophila*. Twenty gouramy fishes with average weight 20-30 gram and height 7,5-8,5 cm were randomly divided into 5 groups. P0- as a negatif control without *Spirulina platensis* extract immersion and without infected by *Aeromonas hydrophila*. P0+ as a positif control without *Spirulina platensis* extract immersion, then infected by *Aeromonas hydrophila* 10^6 sel/ml. Gouramy immersion in doses 200mg/L (P1), 400mg/L (P2) dan 600mg/L (P3) of *Spirulina platensis* extract were done for 3 hours on first day (1st immersion) and seventh day (2nd immersion), then infected by *Aeromonas hydrophila* 10^6 sel/ml after 24 hours from second immersion. Fishes necroption were done on four day after infection of *Aeromonas hydrophila* for intestine histopatology. The data were analyzed with Kruskal Wallis test and followed with Man Whitney test. The result of this study showed that *Spirulina platensis* extract can reduce the erosion of villi and inflammation cells density of gouramy intestine.

Key words: *Spirulina platensis*, *Aeromonas hydrophila*, intestine.