

**EFFECT EXTRACT *Spirulina platensis* ON KIDNEY
HISTOPATHOLOGY OF GOURAMY FISH (*Osphronemus Gouramy*)
INFECTED WITH *Aeromonas hydrophila***

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ABSTRACT

This study aimed to assess the immunostimulatory potential of *Spirulina platensis* extract to histopathological change of gouramy fish kidney because *Aeromonas hydrophila* infection. The research method used five treatments and four replications. Twenty gouramy fish with average weight 20-30 grams were randomly divided into five treatments, including P0-, P0+, P1, P2 and P3. P0- was the group of fish without treatment, P0+ was the group of fish infected by *Aeromonas hydrophila*, P1 was the group of fish dipping with *Spirulina platensis* extract at 200 mg L⁻¹, P2 was the group of fish dipping with *Spirulina platensis* extract at 400mg L⁻¹, and P3 was the group of fish dipping with *Spirulina platensis* extract at 600mg L⁻¹ and then after 24 hours infected with 10⁶ CFU ml⁻¹ *Aeromonas hydrophila*. Data were collected on the fourth day after infection. The results of Kruskal Wallis test indicates that there are significant difference (p<0.05) among the treatments, the further test used Mann Whitney can be seen there are no effect of glomerular and tubular kidney necrosis of gouramy fish in all treatment P1, P2 and P3. The conclusion is the immersed with *Spirulina platensis* extract and challenged with *Aeromonas hydrophila* can decrease the damage of the kidney tubular, glomerular and hemopoitic tissue of gouramy fish.

Key words: *Spirulina platensis* extract, *Aeromonas hydrophila*, gouramy fish, kidney