THE HISTOPATHOLOGY OF HEPATOPANCREAS GOURAMY (*Osphronemus gouramy*) POST *Aeromonas hydrophila* INFECTION THAT TREATED BY SAMBILOTO (*Andrographis panniculata*) LEAF EXTRACT IN VARIOUS DURATION

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ABSTRACT

The aim of this study was to investigate the most positive effect of Sambiloto (*Andrographis panniculata*) leaf extract in various duration on histopathological hepatopancreas of gouramy infected by *Aeromonas hydrophila*. Thirty gouramies with 8-11 cm legth were devided in to six (n=6) of treatment group, including PO-, PO+, P1, P2, P3, and P4 respectively for control, the group that infected with 10^6 CFU/ml of *Aeromonas hydrophila* in 5 liters water, the group that infect *Aeromonas hydrophila* with the same dose and treated with 100 ppm extract of leaf in 30 minutes, 60 minutes, 90 minutes, and 120 minutes. After 3 days of adaptation, PO+, P1, P2, P3, and P4 groups were infected for a day and then treated with Sambiloto leaf extract, except of group PO-. All fishes were euthanazid for data collection. The data of vasculitis and histopathological changes of hepatopancreas were analyzed with Kruskal Wallis test. This research showed there were significantly different ($P<0,05$) between groups either for histopathological changes of hepatosit and endothelial. It was proved that P4 was most effective those, that showed the most mild histopathological changes.

***Key word* :** Sambiloto (*Andrographis paniculata)* leaf extract, histopathology, hepatopancreas, *Aeromonas hydrophila*, gouramy (*Osphronemus gouramy*)