THE PATHOLOGY OF AFRICAN CATFISH (*Clarias gariepinus*) KIDNEY INFECTED BY *Edwardsiella tarda*

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**ABSTRACT**

The aim of this study was to know differences of damage in African Catfish (*Clarias gariepinus*) kidney infected by *Edwardsiella tarda* depends on long exposure of infection in macroscopic and microscopic examination. Twenty four African Catfishes with 10-12 cm length were randomly divided into four groups of treatment (P0, P1, P2 and P3). Six repetitions each those (P1, P2 and P3) were given with the same dosage of *Edwardsiella tarda* (3x10⁶ CFU/ml), P0 (control, without treatment). All treatments observed on day 3, 5 and 7. Macroscopically, the kidney of infected fish was swelling and darker in color. The data of kidney histopathological alteration including congestion, inflammation, degeneration and necrosis were analyzed by *Kruskal wallis* test followed with *Mann-Whitney* test. The value of mean and standard deviation (SD) of each groups were 2.87 ± 1.51 (P0), 9.73 ±1.12 (P1, 3 days after infected), 12.60 ± 1.45 (P2, 5 days after infected) and 11.80 ± 1.53 (P3, 7 days after infected). This research showed there were significantly differences (p<0.05) between groups that infected by *Edwardsiella tarda* depends on long exposure of infection. Result showed the most severe damage was occurred on day 5 after infection (P2).