

ABSTRACT

The research has been done to 45 fish of *Cyprinus carpio* with the size range between 6 – 8 Cm. The samples were divided into 5 groups treatment and 3 replication, and each treatment consist of 9 fishes. The 5 treatment are pH 5, pH 5,5, pH 6, pH 7 and pH 8 in the reared water. The fish reared in water with 5 pH treatment, and then fish to be infected with *Aeromonas hydrophila* according to ID-50. The collected data are total bacterial number in skin, gill, kidney and rearing water at the day of 2, 6 and 10 after infection with *A. hydrophila*.

The data were then tabulated and analysis using anova and if the result signification the test to be continued with Duncan multiple range test of 5 %.

The results of experiment showed that pH of rearing water significantly had influenced to bacterial growth on fish. The potential water pH which could triggered bacterial growth in fish are pH 5 and pH 5,5.