THE OVERVIEW OF GILL HISTOPATHOLOGY OF GOURAMY FISH
(Osphronemous gouramy) INFECTED BY Vibrio anguillarum BY GIVING
MENIRAN (Phyllanthus niruri, Linn) INFUSION

Rusyida Rizki Nurwandini

ABSTRACT

The aim of this research was to determine that effect of Phyllanthus nirurui, Linn infusion can decrease the damage of gouramy’s fish gills were infected by Vibrio anguillarum. Twenty gouramy fish with the average weight of 100 grams are randomly divided into five groups for treatment by each four of replicates. P0- (gouramy fish control), P0+ (gouramy fish infected by Vibrio anguillarum), P1 (gouramy fish infected by Vibrio anguillarum and dipping in meniran infusion concentration 10%), P2 (gouramy fish infected by Vibrio anguillarum and dipping in meniran infusion concentration 20%), P3 (gouramy fish infected by Vibrio anguillarum and dipping in meniran infusion concentration 30%). Gouramy fish on group P0+; P1; P2; and P3 with Vibrio anguillarum infected in 10^6 CFU/ml concentration for 24 hours. The treatment by dipping in Phyllanthus nirurui, Linn infusion a dose of 10%, 20%, and 30%. For P1; P2; P3 for 5 days. Various types of damage in this research are edema, fusion, and hyperplasia of gill lamellae. The result of statistical test by Kruskal Wallis indicates were significant differences (p<0,05) among the treatments, the further that result by Mann Whitney test can be seen that the damage of the gill lamellae of Osphronemous gouramy fish in P3 shows the lowest result. Result showed Phyllanthus niruri, Linn infusion can reduced damage of gouramy’s fish gill lamellae were infected by Vibrio anguillarum. Group P3 (30% concentration) was the most effective dose in reduced the damage of gouramy’s fish gill lamellae were infected by Vibrio anguillarum.

Key words: Gouramy fish, Vibrio anguillarum, Meniran infusion, Gill histopathology.