

## ABSTRAK

White Snapper (*Lates calcarifer*) is a fish with important economic value because it is an export commodity with a wide market. In recent years, white snapper aquaculture in Dewantara Subdistrict has experienced problems, namely the occurrence of mass mortality that show the characteristics of fish attacked by bacterial diseases. The solution to overcome this problem is to conduct pathogenicity testing as an effort to overcome and prevent bacterial attacks that cause bacterial diseases in white snapper farming. The purpose of this study was to test the pathogenicity of bacteria that cause bacterial diseases, as well as to test the ability of antibiotic materials to inhibit the growth of bacteria that cause bacterial diseases. This research was conducted at the Brackish Water Aquaculture Center (BPBAP) Ujung Batee, Aceh Besar, Aceh from January to February 2024. This study used the Non-Factorial Completely Randomized Design (CRD) method with 2 tests, namely antimicrobial sensitivity testing with 3 treatments and 1 control. Treatment A, B, C using *Tetracycline*, *Oxytetracycline*, and *Enrofloxacin* antibiotics and control using *Blank disk*, and LD 50 testing with 6 treatments 1 control and 3 replicates. Treatments A, B, C are *P. multocida* with a density of  $10^5 - 10^7$  CFU/mL and D, E, F are *P. damsela* with a bacterial density of  $10^5 - 10^7$  CFU/mL. The results showed that the bacteria *P. multocida* and *P. damsela* had an effect on clinical symptoms, mortality, and RWK of sea bass with the LD50 value of *P. multocida* being  $1.7 \times$  CFU/mL, and the LD50 value of *P. damsela* being  $2.1 \times$  CFU/mL. The highest mortality rate was 100% and the fastest RWK was 66.40 hours. The antibiotics that have the most effect on the growth of bacteria that cause bacterial disease are *Enrofloxacin* antibiotics with inhibition zones of 41.67 mm and 40 mm.

Keywords : *Lates calcarifer*, *Pasteurella multocida*, *Photobacterium damsela*, Bacterial Diseases