ACUTE TOXICITIES OF CHLORINE FORMALIN AND AMMONIA TO BANANA SHRIMP (*Penaeus merguiensis* DE MAN) POST LARVAE

Kriengsak Phadetphai

Chachoengsao Coastal Fisheries Research and Development Center, Ta sa-arn Subdistrict, Bangpakong District, Chachoengsao Province 24310, Thailand

ABSTRACT

Acute toxicities of chlorine formalin and ammonina to mortality rate of banana shrimp (*Penaeus merguiensis*) post larvae 15 were studied using LC$_{50}$ (Lethal Concentration) of Reed and Muench method (1983). The safety concentration was LC$_{50}$ multiply application factor (0.1). The results showed that 24 h - LC$_{50}$ of chlorine was 3.06 ppm and safety concentration was 0.30 ppm. The 24 h - LC$_{50}$ of formalin was 107.77 ppm and safety concentration was 10.78 ppm. And the 24 h - LC$_{50}$ of ammonia was 28.22 ppm and safety concentration was 2.82 ppm. These results could used banana shrimp (*Penaeus merguiensis*) hatchery and grow - out pond in case of applying chemicals for water treatment. And also, the data could applied for detecting the mortality of banana shrimp in hatcheries.

Keywords: Banana Shrimp (*Penaeus merguiensis*), Acute Toxicities, Chlorine Formalin, Ammonia