

Antiparasitic effect of formalin, trichlorfon, hydrogen peroxide, and copper sulfate on the parasitic isopod *Caecognathia coralliophila*

Abstract

Caecognathia coralliophila is known as a pathogenic ectoparasite infecting tiger grouper *Epinephelus fuscoguttatus* in a hatchery in Sabah, Malaysia. The effects of copper sulfate, formalin, trichlorfon, and hydrogen peroxide on the survival of *C. coralliophila* larvae were tested *in vitro*. The larvae were exposed to different concentrations of each chemical for 10, 20, 30, 60 min, or 24 h. Trichlorfon was found to be the most effective, killing the parasites within 24 h at 0.2 ppm. Consequently, the toxicity of trichlorfon to tiger grouper was tested. Fish were exposed to trichlorfon at 0.2 ppm for 24 h or 3.2 ppm for 60 min. No fish died in the experiment. Thus, our data suggest that trichlorfon is effective for treating *C. coralliophila* infection in *E. fuscoguttatus*.