Toxicity of Chemically Enhanced Water-Accommodated Fraction (CEWAF) of Petron Bunker C Oil on Asian Sea Bass *Lates calcarifer* (Bloch) Fingerlings at Different Salinity Levels

A Special Problem

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ABSTRACT

Asian sea bass *Lates calcarifer* fingerlings were exposed to three CEWAF concentrations (0.3, 0.5 and 1.0%) at 28, 32 and 36‰ and the mortality rate among the different treatments were compared. Dunnett t-test (α=0.05) showed that mortality in the CEWAF-exposed treatments differed significantly from that in the control, indicating that the toxicity of CEWAF caused the death of the fingerlings. The general trend of mortality was increasing with increased salinity although the results of Two-Way ANOVA (α=0.05) reveal that salinity did not influence the toxicity of CEWAF significantly. Further analysis with Fisher's LSD test (α=0.05) showed that mortality only differed significantly between the 28‰ and 36‰ salinity groups. The differences between the salinity levels used in this experiment were too narrow to cause a significant difference in the interaction between CEWAF concentration and salinity. Sublethal effects of exposure to CEWAF observed in this study included aberrant swimming behavior, arching of the back, loss of buoyancy and loss of pigmentation.