

DE LA SALLE UNIVERSITY

ABSTRACT

Experimental exposure of *T. nilotica* to As(V) was done using a continuously aerated static bioassay system. The silverdiethyldithiocarbamate (AgDDC) method of arsenic analysis was utilized to determine arsenic concentrations from the samples.

Probit analysis for the estimation of the acute toxicity showed the 96h LC₅₀ to be at 79 mg/l. Estimates of the rate (Δ conc/ Δ time) and percent values of total As(V) bioaccumulation and bioelimination revealed an oscillating pattern over the 96h period of exposure. Such pattern showed that As(V) can be bioaccumulated within a short period of time (0.5h). Likewise, the pattern also showed that As(V) was bioeliminated once the contaminated organism (*T. nilotica*) was placed in arsenic-free medium.

