The Effects of Acetaminophen on Daphnia magna and Daphnia magna Resting Eggs

Mills, Ethan

The purpose of this study was to investigate the effects of an over-the-counter analgesic, Acetaminophen (commonly known as Tylenol™) on the freshwater invertebrate crustacean species, Daphnia magna, and on Daphnia magna resting eggs (ephippia). The Daphnia magna 24-hour acute toxicity test methodology was used on the live daphnids and was adapted to the resting eggs. Both daphnids and resting eggs were dosed with increasing concentrations of Acetaminophen to measure immobility in the live daphnids and inhibition of hatching in the eggs. Data was evaluated with USEPA Probit Analysis (Ver. 1.5) statistical software. Results indicated that the Daphnia magna resting eggs may not be adaptable to the 24-hour acute toxicity test.

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