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Studies on Sediment Toxicity Bioassays Using *Chironomus thummi* K., 1911 Larvae

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Abstract: The acute toxicity of zinc, copper and lead to freshwater dipteran *Chironomus thummi* larvae was evaluated by static bioassays, calculating the LC₅₀ (lethality concentration for 50%). Mortality increased with increasing concentrations of zinc, copper and lead. The LC₅₀s of Zn, Cu and Pb for survival were 11.2, 19.1 and 14.3 µg g⁻¹, respectively. The results indicated that Zn had the greatest toxicity, followed by Pb and Cu. Individual weight increased with increasing Cu, Zn and Pb concentrations. The results are discussed and compared with those of other studies.

Key Words: Zinc, copper, lead, lethality concentration, *Chironomus thummi*, larvae, bioassay

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