ABSTRACT

The effects of copper, iron and zinc on Moina macrocopa, (Waterflea) were determined on the basis of median lethal concentrations (LC_{50}) and a decrease in numbers of young produced (reproductive impairement). The LC_{50} values of toxicants on M. macrocopa were 0.82, 0.09, 0.04 and 0.03 mg/l for copper, 50.05, 25.53, 18.90 and 16.08 mg/l for iron and 6.61, 1.18, 0.21 and 0.14 mg/l for zinc at the exposure times of 12, 24, 36 and 48 hrs respectively.

All of the toxicants decrease the numbers of young produced, reproductive capacity and longevity of M. macrocopa, especially zinc.

The maximum acceptable toxicant concentration values (MATC) of copper, iron and zinc with the application factor of 0.88, 0.6 and 0.3 were 0.026, 10.0 and 0.051 mg/l respectively.