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The Toxic Effects of Malathion (Organophosphate Insecticide) on the *Daphnia magna* Straus, 1820 (Crustacea, Cladocera)

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Abstract: The toxic effects of technical grade (95 %) malathion and commercial (25 %) malathion were investigated on young (± 24 h old) *Daphnia magna* in static acute toxicity tests (24 and 48 h). The culture of *D. magna* and toxicity tests were performed at 24 ± 1 °C with a photoperiod of 16 h light and 8 h dark. To obtain a healthy population, the fecundity of each female in their life cycle was also investigated. The immobilization of daphnids was considered for determination of the 24 h / 48 h effective concentration (50 %). The EC50 values were found by the probit method 24 h /48 h for technical malathion as 0.8 and 0.028 ppm., and for commercial malathion as 0.11 and 0.003 ppm respectively.

Key Words: Crustacea, Cladocera, *Daphnia magna*, malathion, toxicity

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