. Effect of Cadmium Toxicity in Some Biological Aspects To Water Fleas Daphnia pulex Müller 1785

Tأثير عنصر cadmium في بعض مظاهر الحياة

Daphnia pulex Müller 1785

Abstract

The main objectives of the present study was to determine the toxicity effects of cadmium ion on the reproductive potential of Daphnia pulex Müller females. by finding the LC50 and Chronic effect on reproduction potential assimilated by finding brood number / female, Juvenile number / female and time intervals between clutches.

And we fined that LC50 for cadmium for 24 hour exposure was 30 ppb. As well in chronic exposure we used the Concentrations (5, 10, 15, 20, 25) ppb Cadmium appeared its toxic effects by reducing brood numbers for each female, So and appeared its toxic effect by increasing its time intervals between Clutches while the Concentrations used increased, and there are significant differences appeared between Control sample and Concentrations used so and so between concentrations used.

Number of Juvenile per female decreased by increasing Cadmium Concentration either for productive females only or for productive and non prod actives, Lastly Cadmium had Clearly toxic effect for total stages of reproductive Potential for D. pulex Females