

Effects of pesticide, indoxacarb on zebrafish (Danio Rerio) toxicity test

ABSTRACT

The effect of different concentrations of indoxacarb were studied on adult and embryos of zebrafish (*Danio rerio*). Acute and chronic toxicity tests were performed on adult and embryos, at different concentrations. At the highest concentration of 30 ppm, there was significant reduction on the hatching rate of embryos. The lethal concentration (LC50) in this study was 1.44 ppm. In acute and chronic toxicity on adult zebrafish, at concentrations of 0.5 ppm and 1.0 ppm, survival was until 14 days. Based on our findings we suggest to reduce the chemical footprint, if not on a total ban on indoxacarb, especially for agricultural applications.

Keyword: Pesticides; Indoxacarb; Toxicity; Zebrafish