

**National Agricultural Research Project (NARP)**

**Acute Toxicity of Diazinon on Rotifers, Cyclops, Mosquito Larvae and Fish**

**Agbon, A. O., Ofojekwu, P. C., Ezenwaka, I. S. and Alegbeleye, W. O.**

**ABSTRACT**

Acute toxicity tests were conducted in renewable static bioassays to determine the 48h-LC<sub>50</sub> of Diazinon on rotifers, cyclops, mosquito larvae and fish. The 48h-LC<sub>50</sub> values were 3.93 mg/l, 39.39, 9.87 and 189.31 µg/l for rotifers, cyclops, mosquito larvae and fish respectively. The rotifers had the highest value hence the least sensitive to Diazinon intoxication. The probit mortalities of the test organisms was found to be positively correlated to the log-concentration except for rotifers, which showed negative correlation at 5% level of significance. Diazinon was highly toxic to mosquito larvae and cyclops, which are targets in the control of vectors of parasitic diseases. The toxicity of Diazinon on aquatic fauna thus affects the trophic levels in aquatic biota and the productivity of water bodies.