

TOXICITY OF INSECTICIDES TO A FEW SPECIES OF FISH

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The acute toxicity (48hr. LC 50) of commercial formulations of four insecticides used in the control of agricultural pests in Sri Lanka to the fingerlings of Oreochromis niloticus hybrid and Cyprinus carpio(L.) was investigated under static laboratory conditions at 28-29°C following standard methodology¹. The acute toxicity of two of these insecticides was also tested for Barbus filamentosus (Valenciennes) and Barbus nigrofasciatus (Gunther) under the same conditions. The relative toxicity of the four insecticides was seen to be similar for all species tested. viz. Curater>Lebaycid>Basudin>Monocrotophos. The range of concentration toxic to the other species tested was found to be similar in magnitude to the range for Oreochromis niloticus hybrid and Cyprinus carpio indicating that the sensitivity of tilapia & common carp (introduced species which comprise over 90% inland fisheries in Sri Lanka) was similar to the indigenous species tested, for the insecticides investigated. It is suggested that since tilapia is relatively the easiest to culture under laboratory conditions & its sensitivity is similar to the other species tested, that it would be a very suitable organism to be used as a test species for toxicity tests in Sri Lanka.

References: 1. FAO Fisheries Technical Paper No. 247 (1987)
Manual of methods in aquatic environment research
Part 10 - Short-term static bio assays.