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**ACUTE TOXICITY OF MALATHION, DICHLORVOS AND TEMEPHOS IN CLIMBING PERCH
(*Anabas testudineus*)**

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ABSTRACT

Malathion, dichlorvos and temephos pesticides are used globally to control a wide range of invertebrate pests especially in Malaysia. These pesticides usually enter aquatic environment by direct application or through overspray, runoff and watersheds. However, applications of pesticides may cause adverse impacts to many non-target organisms such as fish. The objective for this study was to determine the 96 hours lethal concentration (LC₅₀) of each pesticide in climbing perch,

Anabas testudineus

A total of 130

A. testudineus

was subjected to 13 aquariums. Fish were exposed to different concentrations of each pesticide for 96 hours. Fish were observed daily and dead fish were removed immediately.

The 96h LC

50

value for

malathion, dichlorvos and temephos

was determined as 0.25 mg/L, 2.35 mg/L and 25.0 mg/L respectively. The results obtained were based on the probit analysis method as described by Finney 1952.

From the values obtained, malathion, dichlorvos and temephos can be classified as highly toxic pesticides since it can kill 50 percent of the population even in lower concentration. Thus, the information in this study can be used as a guide to help environmental management to assure the effective use of these pesticides and to prevent indiscriminate use of pesticides.

Keywords

Anabas testudineus, malathion, dichlorvos, temephos, acute toxicity.