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EFFECT OF ABATE ON FINGERLINGS OF *ORREOCHROMIS MOSSAMBICUS* (PETERS)

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The acute toxicity of abate, an organophosphate larvicide used in the control of mosquitoes Sri Lanka, to the fingerlings of an important food fish. *O. mossambicus* was investigated under static laboratory conditions. The LC_{50} values of Abate for 24, 48 and 96 hours were respectively 27.6 (20.1 - 35.4), 19.2 (9.9 - 20.8) and 12.9 (8.7 - 17.2) ppm. Exposure to high concentrations of Abate (4.0 - 16.0 ppm) for 96 hours significantly depressed the oxygen consumption of these fish. However, sublethal concentrations (<0.5 ppm) had no significant effects. Histopathological studies of the gill tissue revealed that the exposure to high concentrations of Abate (>0.5 ppm) were associated with gill lesions namely epithelial separation, epithelial hyperplasia and telengiectasis of the gill lamellae. It is concluded that Abate could be used in controlling mosquito larvae at the levels of less than 0.5 ppm without apparent short term effects to *O. mossambicus*.