

ALPHAMETHRIN TOXICITY TO AIR BREATHING FRESHWATER FISHES

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ABSTRACT – Toxicity bioassay of alphamethrin against two freshwater fishes *Channa punctatus* and *Clarias batrachus* has been investigated. The short-term (4 and 7 days) LC_{50} with 95% confidence intervals were 272.53 (260.56 – 284.62) and 201.90 (185.89 – 214.65) $g \times l^{-1}$, respectively. The long term (14, 21 and 28 days) LC_{50} s with 95% confidence intervals were 173.77 (156.41 – 184.58), 145.57 (132.17 – 156.42) and 114.18 (98.71 – 131.23) $mg \times l^{-1}$, respectively for *Channa punctatus*. The short-term (4 and 7 days) LC_{50} values with 95% confidence intervals for *Clarias batrachus* were 449.32 (440.25 – 461.32) and 406.56 (395.48 – 417.48) $mg \times l^{-1}$, respectively. The long term (14, 21 and 28 days) LC_{50} s with 95% confidence intervals were estimated as 349.93 (377.79 – 360.62), 316.63 (307.28 – 327.76) and 278.10 (264.18 – 290.04) $mg \times l^{-1}$, respectively. LC_{50} values of *C. batrachus* is approximately 1.5 – 2 times greater than *C. punctatus* for all duration of exposure. So it is clear that *C. batrachus* less sensitive against alphamethrin as compared to *C. punctatus*.

Key words : LC_{50} , alphamethrin, freshwater fish.