

# Exposure of Chlorpyrifos on some Biochemical Constituents in Gills and Muscles of Fresh Water Fish, *Channa Punctatus*

Feroz Ahmad Dar

Department of Zoology, Govt. Vidarbha Institute of Science and Humanities,  
Amravati 444604, India  
E-mail: ferozahmaddar702@gmail.com

---

**Abstract**—Chlorpyrifos an organophosphate (0, 0-diethyl 0-(3, 5, 6-trichloro-2- pyridinyl)-phosphorothioate is a broad-spectrum pesticide which is broadly used in agriculture and in domestic use against harmful insects as well. The major route of chlorpyrifos to aquatic ecosystems is through rainfall runoff and air-drift. Organophosphate chlorpyrifos an insecticide which is widely used at a large scale. This very particular work shows decrease in biochemical constituents by the use of chlorpyrifos in Gills and Muscles of fresh water fish *channa punctatus*. In biochemical estimation the total glycogen was estimated by anthrone reagent and total protein was estimated by folin and wu method. So in Gills, glycogen decreases, 17%, 18%, 34% and 45% in 24 hrs, 48 hrs, 72 hrs, and 96 hrs respectively, and protein was found to be decreased about 7%, 12%, 37% and 53% in 24 hrs, 48 hrs, 72 hrs, and 96 hrs respectively. Similarly in Muscles the glycogen percentage decreases, and was found 19%, 35%, 46% and 60% in 24 hrs, 48 hrs, 72 hrs, and 96 hrs respectively, and protein decreases 37%, 42%, 48% and 54% 24 hrs, in 48 hrs, 72 hrs, and 96 hrs respectively.

**Keywords:** chlorpyrifos, glycogen, protein, *channa punctatus*, Gills and Muscles.