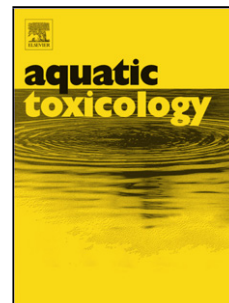


Accepted Manuscript

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PII: S0166-445X(18)30010-9
DOI: <https://doi.org/10.1016/j.aquatox.2018.01.010>
Reference: AQTOX 4839

To appear in: *Aquatic Toxicology*

Received date: 18-10-2017
Revised date: 10-1-2018
Accepted date: 11-1-2018

Please cite this article as: Maharajan, Kannan, Muthulakshmi, Sellamani, Nataraj, Bojan, Ramesh, Mathan, Kadirvelu, Krishna, Toxicity assessment of pyriproxyfen in vertebrate model zebrafish embryos (*Danio rerio*): A multi biomarker study. *Aquatic Toxicology* <https://doi.org/10.1016/j.aquatox.2018.01.010>

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Toxicity assessment of pyriproxyfen in vertebrate model zebrafish embryos (*Danio rerio*): a multi biomarker study

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Highlights

- PPF toxicity in zebrafish embryos was studied using multiple biomarker endpoints.
- PPF causes severe developmental abnormalities in 1.66 µg/mL concentration.
- PPF alters biochemical and antioxidant responses and inhibits AChE.
- PPF causes DNA damage and alters histology at 1.66 µg/mL concentration.

Abstract

Pyriproxyfen (2-[1-methyl-2-(4-phenoxyphenoxy) ethoxy] pyridine) (PPF), is a pyridine-based pesticide widely used to control agricultural insect pests and mosquitoes in drinking water sources. However, its ecotoxicological data is limited in aquatic vertebrates particularly in fish. Hence, the present study aimed to evaluate the adverse effect of PPF in zebrafish embryo development (*Danio rerio*). In order to investigate the impact of PPF, embryos were exposed to

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