Accepted Manuscript

Received date: Revised date:

Accepted date:

Title: Multi-compartmental toxicokinetic modeling of fipronil in tilapia: Accumulation, biotransformation and elimination

Authors: Huizhen Li, Jing You, Wen-Xiong Wang

11-5-2018

5-7-2018

23-7-2018



Please cite this article as: Li H, You J, Wang W-Xiong, Multicompartmental toxicokinetic modeling of fipronil in tilapia: Accumulation, biotransformation and elimination, *Journal of Hazardous Materials* (2018), https://doi.org/10.1016/j.jhazmat.2018.07.085

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Multi-compartmental toxicokinetic modeling of fipronil in tilapia: Accumulation, biotransformation and elimination

Huizhen Li^{1,2}, Jing You^{2,*}, Wen-Xiong Wang^{1,*}

¹Department of Ocean Science, The Hong Kong University of Science and Technology (HKUST), Clear Water Bay, Kowloon, Hong Kong ²School of Environment and Guangdong Key Laboratory of Environmental Pollution and Health, Jinan University, Guangzhou 510632, China

*Corresponding author

wwang@ust.hk, phone: (852)-23587346; youjing@jnu.edu.cn, phone: (86)-20-37336629

Graphical abstract



Highlights:

- Tissue-specific disposition and biotransformation of fipronil in tilapia were modeled
- Fipronil was metabolized to fipronil sulfone in the liver and intestine
- Inter-compartmental transport of fipronil in tilapia was highly dynamic
- Low branchial excretion may explain the longer half-life of sulfone than fipronil in fish

Download English Version:

https://daneshyari.com/en/article/11003007

Download Persian Version:

https://daneshyari.com/article/11003007

Daneshyari.com