



**Journal of Pesticide Science**  
Pesticide Science Society of Japan

[Available Issues](#) | [Japanese](#) >> [Publisher Site](#)

Author:  Keyword:   [ADVANCED](#)



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1349-0923

PRINT ISSN : 1348-589X

## Journal of Pesticide Science

Vol. 32 (2007) , No. 3 pp.189-199



[\[PDF \(155K\)\]](#) [\[References\]](#)

### Environmental fate and toxicology of fipronil

Amrith S. Gunasekara<sup>1)</sup>, Tresca Truong<sup>1)</sup>, Kean S. Goh<sup>2)</sup>, Frank Spurlock<sup>2)</sup> and Ronald S. Tjeerdema<sup>1)</sup>

1) Department of Environmental Toxicology, College of Agricultural and Environmental Sciences, University of California

2) Department of Pesticide Regulation, California Environmental Protection Agency

(Received: January 10, 2007)

(Accepted for publication: February 13, 2007)

#### Abstract:

Fipronil is a relatively new insecticide that controls a broad spectrum of insects at low field application rates. It is a “new generation” insecticide because its mode of action, interference with the normal function of  $\gamma$ -aminobutyric acid (GABA)-gated channels, differs from the classical insecticides, such as organophosphates and carbamates, to which some insects have developed resistance. Fipronil is extensively used throughout the world and numerous studies have evaluated its toxicity and environmental fate. However, a concise review summarizing and combining the recent scientific findings available in the scientific literature is lacking even though the pesticide has been found to be highly toxic to some aquatic organisms. Thus, this document evaluates, summarizes, and combines important toxicological and environmental fate information from recent scientific articles and other literature to produce a detailed review of fipronil.

#### Keywords:

fipronil, environment, fate, toxicity, degradation, detections



[\[PDF \(155K\)\]](#) [\[References\]](#)

To cite this article:

Amrith S. Gunasekara, Tresca Truong, Kean S. Goh, Frank Spurlock and Ronald S. Tjeerdema, "Environmental fate and toxicology of fipronil". *J. Pestic. Sci.* Vol. **32**, pp.189-199 (2007) .

---

doi:10.1584/jpestics.R07-02

JOI JST.JSTAGE/jpestics/R07-02

*Copyright (c) 2007 Pesticide Science Society of Japan*

---

[View "Advance Publication" version \(June 20, 2007\).](#)

---



---

[Japan Science and Technology Information Aggregator, Electronic](#)

