Jestage				My J-STAGE Sign in
	Journal of P	esticide So	cience le Science So	ciety of Japan
Available Issues	Japanese		>>	Publisher Site
Author:	Keywor	1:	Search	ADVANCED
	Add to Favorite/Citation Articles Alerts	Add to Favorite Publications	Register Alerts	
<u>TOP &gt; Available</u>	<u>Issues</u> > <u>Table of Conte</u>	<u>nts</u> > Abstract		

ONLINE ISSN : 1349-0923 PRINT ISSN : 1348-589X

## Journal of Pesticide Science

Vol. 31 (2006), No. 4 pp.397-404

[PDF (347K)] [References]

## Sensitivity monitoring of powdery mildew pathogens to cyflufenamid and the evaluation of resistance risk

Masahiro Haramoto<sup>1)</sup>, Hiroshi Hamamura<sup>2)</sup>, Shinsuke Sano<sup>3)</sup>, Friedrich G. Felsenstein<sup>4)</sup> and Hiroshi Otani<sup>5)</sup>

1) Haibara Agricultural Research Center, Nippon Soda Co., Ltd.

2) Agro Product Division, Nippon Soda Co., Ltd.

3) Odawara Research Center, Nippon Soda Co., Ltd.

4) EpiLogic GmbH, Agrobiological Research

5) Faculty of Agriculture, Tottori University

(Received: April 24, 2006) (Accepted for publication: July 10, 2006)

## Abstract:

Sensitivity monitoring studies for a novel fungicide, cyflufenamid, (*Z*)-*N*-[ $\alpha$ -(cyclopropylmethoxyimino)-2,3- difluoro-6-(trifluoromethyl)benzyl]-2-phenylacetamide, were performed on various pathogens causing powdery mildew. The mean EC<sub>50</sub> value for

*Blumeria graminis* f. sp. *tritici* was 0.029 ppm by pot assay and that for *Sphaerotheca cucurbitae* was 0.0019 ppm by leaf disk assay in Japan. The mean  $EC_{50}$  values for *B*.

*graminis* f. sp. *tritici* were between 0.0022 ppm and 0.0111 ppm and those for *B*. *graminis* f. sp. *hordei* were between 0.0249 ppm and 0.0457 ppm in 2000 to 2004 by leaf segment assay in Europe. The  $EC_{50}$  values of each strain in these pathogens were

distributed within a narrow range, and no classes less sensitive to cyflufenamid were found. No significant change in the sensitivity of *B. graminis* f. sp. *tritici* to cyflufenamid was observed throughout selection pressure tests in the greenhouse and field. Cross-resistance between cyflufenamid and other commercial fungicides was not observed in *S. cucurbitae*.

## **Keywords:**

cyflufenamid, powdery mildew, baseline sensitivity

Download Meta of Article[Help] <u>RIS</u> <u>BibTeX</u>

To cite this article:

Masahiro Haramoto, Hiroshi Hamamura, Shinsuke Sano, Friedrich G. Felsenstein and Hiroshi Otani, "Sensitivity monitoring of powdery mildew pathogens to cyflufenamid and the evaluation of resistance risk". *J. Pestic. Sci.* Vol. **31**, pp.397-404 (2006).

doi:10.1584/jpestics.G06-13 JOI JST.JSTAGE/jpestics/G06-13

Copyright (c) 2006 Pesticide Science Society of Japan

View "Advance Publication" version (September 7, 2006).



Japan Science and Technology Information Aggregator, Electronic JSTAGE