

## Evaluation Report for Category B, Subcategory 5.0 Application

**Application Number:** 2008-5286  
**Application:** New MRL for previously assessed TGAI  
**Product:** Fludioxonil Technical Fungicide  
**Registration Number:** 24731  
**Active ingredients (a.i.):** fludioxonil  
**PMRA Document Number :** 1929393

### Purpose of Application

The purpose of this submission is to establish or revise MRLs on a variety of imported crops.

### Health Assessments

To support the establishment of maximum residue limits (MRLs) for imported commodities, residue data generated from field trials conducted in the US were reviewed for pomegranate, sweet potatoes, tomatoes, basil, chive, parsley, radish, carrot, cantaloupe, cucumber, squash and avocado. In addition, a processing study in treated tomatoes was reviewed to determine the potential for concentration of residues of fludioxonil into processed commodities.

### MRL Recommendations

Based on the residue data, MRLs to cover residues of fludioxonil in/on the proposed imported crops will be established as shown in Table 1. Residues of fludioxonil in processed commodities not listed in Table 1 are covered under established MRLs for the raw agricultural commodities (RACs).

| Table 1. Summary of Field Trial and Processing Data Used to Establish Maximum Residue Limit(s) (MRLs) |                                                            |            |                |           |                                |                                        |                                                                                                      |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------|----------------|-----------|--------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------|
| Commodity                                                                                             | Application Method/<br>Total Application Rate (kg a.i./ha) | PHI (days) | Residues (ppm) |           | Experimental Processing Factor | Currently Established MRL <sup>1</sup> | Recommended MRL <sup>2</sup>                                                                         |
|                                                                                                       |                                                            |            | Min            | Max       |                                |                                        |                                                                                                      |
| Pomegranate                                                                                           | post-harvest dip/<br>0.6 kg a.i./1000L water               | na         | 0.5            | 1.13      | --                             | 1.7                                    | same                                                                                                 |
| Sweet potatoes                                                                                        | post-harvest dip/<br>0.6 kg a.i./1000L water               | na         | 2.23           | 2.81      | --                             | 0.02                                   | 3.5 ppm<br>(Crop Subgroup 1D – Tuberous and corn except potato subgroup), except true yam            |
| Avocado                                                                                               | foliar application/<br>0.974-0.995                         | 0          | <0.01<br>6     | 0.19      | --                             | none                                   | 0.45 ppm<br>(avocado, black sapote, canistel, mamey sapote, mango, papaya, sapodilla and star apple) |
| Tomato                                                                                                | foliar application/<br>0.969-1.012                         | 0          | 0.02           | 0.23      | --                             | 0.01                                   | 0.5 ppm<br>(tomatoes & tomatillos)                                                                   |
| Basil (fresh)                                                                                         | foliar application/<br>0.979-0.985                         | 7          | 1.77           | 3.41      | --                             | 0.02                                   | 10 ppm<br>(Herb Subgroup 19A, fresh)<br><br>65 ppm<br>(Herb Subgroup 19A, dried)                     |
| Basil (dried)                                                                                         |                                                            |            |                |           | 7.5x                           | 0.02                                   |                                                                                                      |
| Chive (fresh)                                                                                         | foliar application/<br>0.993-1.012                         | 7          | 1.74           | 4.54      | --                             | 0.02                                   |                                                                                                      |
| Chive (dried)                                                                                         |                                                            |            |                |           | 8.0x                           | 0.02                                   |                                                                                                      |
| Parsley (dried)                                                                                       | foliar application/<br>0.975-0.982                         | 7          | 8.87           | 22.2<br>9 | --                             | 0.02                                   |                                                                                                      |
| Radish tops                                                                                           | foliar application/<br>0.478-0.526                         | 7-8        | 0.42           | 11.3      | --                             | 8 ppm<br>(turnip greens)               | 30 ppm<br>(Crop Group 2 - Leaves of Root and Tuber vegetables)                                       |

|                  |                                    |     |       |      |    |          |                                                                          |
|------------------|------------------------------------|-----|-------|------|----|----------|--------------------------------------------------------------------------|
| Carrot           | foliar application/<br>1.470       | 7   | 0.31  | 0.34 | -- | 0.75 ppm | 0.75 ppm<br>(Crop Subgroup 1B -<br>Root Vegetables<br>except sugar beet) |
| Radish<br>roots  | foliar application/<br>0.478-0.526 | 7-8 | <0.02 | 0.13 | -- | 0.02     |                                                                          |
| Cantaloup<br>e   | foliar application/<br>0.979-0.989 | 1   | 0.02  | 0.52 | -- | 0.01     | 0.45 ppm<br>(Crop Group 9 –<br>Cucurbit vegetables)                      |
| Cucumber         | foliar application/<br>0.964-0.989 | 1   | 0.01  | 0.13 | -- | 0.01     |                                                                          |
| Summer<br>squash | foliar application/<br>0.979-1.039 | 1   | 0.01  | 0.08 | -- | 0.01     |                                                                          |

<sup>1</sup>MRL(s) currently established in Health Canada's List of MRLs regulated under PCPA.

<sup>2</sup>MRL(s) to be established as a result of the current submission  
na – not applicable

### Environmental, Chemistry and Value Assessments

Environmental, chemistry and value assessments were not required for this application.

### Conclusion

Following the review of all available data, MRLs of 3.5 ppm for imported tuberous and corm vegetables except potato subgroup (Crop Subgroup 1D) (except true yam); 0.45 ppm for imported avocado, black sapote, canistel, mamey sapote, mango, papaya, sapodilla and star apple; 0.5 ppm for imported tomatoes and tomatillos; 10 ppm for imported herb Subgroup 19A, fresh; 65 ppm for imported herb subgroup 19A, dried; 30 ppm for imported leaves of root and tuber vegetables (Crop Group 2); 0.75 ppm for imported root vegetables except sugar beet (Crop Subgroup 1B); and 0.45 ppm for imported cucurbit vegetables (Crop Group 9) will not pose an unacceptable dietary exposure to any segment of the population, including infants, children, adults and seniors.

## References

- 1672314 2008, Fludioxonil - Magnitude of the Residues in or on Pomegranate, DACO: 7.4.1
- 1672318 2008, Fludioxonil: Magnitude of the Residues in or on Sweet Potato (IR-4 PR. No. 08402), DACO: 7.4.1
- 1672321 2005, Cyprodinil + Fludioxonil: Magnitude of the Residues in or on Avocado (IR-4 PR No. 07338), DACO: 7.4.1
- 1672323 2006, Cyprodinil + Fludioxonil: Magnitude of the Residue on Carrot (IR4 PR. No. A7090), DACO: 7.4.1,7.4.2
- 1672325 2007, Cyprodinil + Fludioxonil: Magnitude of the Residue on Radish (IR-4 PR No. 09019), DACO: 7.4.1
- 1672327 2006, Cyprodinil + Fludioxonil: Magnitude of the Residue on Parsley (IR-4 Pr No. 07130), DACO: 7.4.1,7.4.5
- 1672330 2002, Cyprodinil + Fludioxonil: Magnitude of the Residue on Chives (IR-4 Study No. 07126), DACO: 7.4.1,7.4.5
- 1672333 2002, Cyprodinil + Fludioxonil: Magnitude of the Residue on Basil (IR-4 Study No. 07123), DACO: 7.4.1,7.4.5
- 1672338 2005, Cyprodinil + Fludioxonil: Magnitude of Residues on Tomato (IR-4 PR No. 08124), DACO: 7.4.1,7.4.2,7.4.5
- 1672341 2007, Fludioxonil and Cyprodinil (A9219B) - Switch - Magnitude of the Residues of Cyprodinil and Fludioxonil in or on Cantaloupe, Cucumber, and Squash as Representative Commodities of Vegetables, Cucurbit, Group 9, DACO: 7.4.1,7.4.2

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2010

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.