Health Canada Santé Canada

Evaluation Report for Category C, Subcategory 6.3 (URMULE) Application

Application Number: 2011-1312
Application: **Category C, subcategory 6.3 (URMULE)**
Product: Acrobat 50 WP Fungicide
Registration Number: 27700
Active ingredients (a.i.): dimethomorph
PMRA Document Number: 2217952

Background

Acrobat 50 WP Fungicide has been registered since (date). Acrobat 50 WP Fungicide is registered for the control (uses). For specific details of uses, application rates and methods, precautions, restrictions, and personal protective equipment requirements, refer to product label.

Purpose of Application

The purpose of this application was to amend the registration of Acrobat 50 WP Fungicide to include the claim of control of downy mildew (caused by *Pseudoperonospora cubensis*) and the suppression of Phytophthora blight (caused by *Phytophthora capsici*) on Crop Group 9 - Cucurbits. The product is intended for application at a rate of 450 g product/ha (225 g a.i/ha) with a maximum of 5 applications per year with a 5-10 day interval between applications and a minimum pre-harvest interval of 2 days.

Chemistry Assessment

A chemistry assessment was not required as there was no change to product chemistry.

Health Assessment

A toxicology assessment was not required since there was no change to the formulation.

The use on cucurbits should not result in unacceptable risk for occupational or bystander exposure over registered uses of dimethomorph since updated quantitative risk assessments were conducted an acceptable MOEs were reached for all scenarios using appropriate mitigation measures.

To support the use expansion to all cucurbit vegetables of Crop Group 9, residue data from supervised residue trials conducted in Canada and the US were reviewed, in which the representative commodities of Crop Group 9, cantaloupe, cucumber and summer squash, were treated with dimethomorph and harvested. In addition, a metabolism study in lettuce was reviewed to complete the data base and to establish the residue definition in plant matrices.

Canada

Maximum Residue Limit

Based on the US and CDN residue trial data, an MRL to cover residues of dimethomorph in/on cucurbit vegetables of Crop Group 9 will be established as shown in Table 1.

Table 1. Summary of Field Trial Data Used to Establish Maximum Residue Limits (MRLs) for Dimethomorph on Crop Group 9, Cucurbit Vegetables

Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)		Currently Established MRL (ppm)	Recommended MRL (ppm)
			Min	Max		
Cantaloupe	1118-1157 (CDN trials)	1	0.13	0.46	None	0.50 for chayote fruit, Chinese waxgourds, citron melons, cucumbers, West Indian gherkins, edible gourds (other than those listed in this item), balsam apples, balsam pears, Chinese cucumbers, cantaloupes, muskmelons (other than those listed in this item), pumpkins, summer squash, winter squash and watermelons
	1561-1591 (US trials)	0	0.035	0.344		
Cucumber	1087-1171 (CDN trials)	1	0.038	0.193		
	1538-1580 (US trials)	0	0.012	0.182		
Summer Squash	1115-1158 (CDN trials)	1	0.022	0.122		
	1561-1605 (US trials)	0	0.010	0.222		

Environmental Assessment

Dimethomorph enters the environment when used as a fungicide on cucurbits. Dimethomorph is moderately persistent in soil. Although the use pattern of dimethomorph does not include direct application to bodies of water, the possibility that aquatic systems may be exposed to dimethomorph, directly or indirectly, cannot be ruled out. As such, the dissipation of dimethomorph was evaluated in aquatic systems, and is determined to be moderately persistent in aquatic systems. Modelling indicates that low levels of dimethomorph may leach to groundwater. Based on its low vapour pressure and Henry's law constant, dimethomorph is considered to be non-volatile in the environment. Dimethomorph residues are, therefore, not expected in the air and long-range transport is not expected. Dimethomorph does not pose a risk to birds or bees. Dimethomorph does pose a low risk to aquatic organisms, and thus mitigative label statements and buffer zones are on the label. No additional data is required for this minor use expansion.

Conclusions

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Acrobat 50 WP Fungicide to include the claim of control of downy mildew (caused by *Pseudoperonospora cubensis*) and the suppression of Phytophthora blight (caused by *Phytophthora capsici*) on Crop Group 9 - Cucurbits.

MRLs

Following the review of all available data, it was determined that an MRL of 0.50 ppm for residues of dimethomorph on cucurbit vegetables of Crop Group 9 is considered adequate to cover residues of dimethomorph in/on these commodities as a result of this new use. Residues of dimethomorph in cucurbit vegetables of Crop Group 9 at the established MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Reference List

Paste a table created from the Web Report located at
Portal / PMRA Business / Web Reports / Workbook / Reference List

For evaluation reports, references should be listed as follows:

A. List of Studies/Information Submitted by Registrant

(Confidential test data/information (including scientific rationales) will be placed into the reading room when the evaluation report is published)

Health Assessment

PMRA #	Reference
1870800	2010, Dimethomorph: Magnitude of the Residue on Cantaloupe. DACO 7.4.1/7.4.2/7.3
1870804	2010, Dimethomorph: Magnitude of the Residue on Cucumber. DACO 7.4.1/7.3
1870805	2010, Dimethomorph: Magnitude of the Residue on Squash, Summer and Winter. DACO 7.4.1/7.3
1872750	2002, Dimethomorph: Magnitude of the Residue on Canataloupe. DACO 7.4.1/7.3
1872752	2002, Dimethomorph: Magnitude of the Residue on Cucumber. DACO 7.4.1/7.3
1872749	2002, Dimethomorph: Magnitude of the Residue on Squash. DACO 7.4.1/7.3
1872715	1994. Amended Final Report. Dimethomorph (Chlorophenyl Ring – ^{14}C): Metabolism in Field Grown Lettuce. DACO 6.3

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