

Evaluation Report for Category B, Subcategory 3.12 Application

Application Number: 2014-1008

Application: Changes to product labels – New site or host

Product: DuPont Verimark Insecticide

Registration Number: 30892

Active ingredients (a.i.): Cyantraniliprole

PMRA Document Number: 2544407

Background

DuPont Verimark Insecticide (Registration Number 30892; guarantee: 200 g/L cyantraniliprole) is currently fully registered for the control of various insect pests for brassica vegetables and potatoes.

Purpose of Application

The purpose of this application was to amend the label of DuPont Verimark Insecticide to include root vegetables and to amend the application rate for brassica vegetables. This application was a Joint Review with the USEPA.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

A toxicology assessment was not required for this application.

DuPont Verimark Insecticide applied to brassica and root vegetables to control flea beetle and cabbage maggot fits within the registered use pattern for cyantraniliprole. Occupational exposures of mixers, loaders, applicators and post-application re-entry workers are not expected to exceed the current exposure to the registered product when following label precautions, including personal protective equipment, and directions.

Residue data from field trials conducted in Canada and the United States were submitted to support the domestic use of DuPont Verimark Insecticide 200 g/L SC on crops within Crop Sub-Group 1B (CSG1B). Cyantraniliprole was applied to the various crops at the approved GAP rate and harvested according to label directions.



The recommendation for maximum residue limits (MRLs) for cyantraniliprole was based upon the submitted field trial data, and the guidance provided in the <u>OECD MRL Calculator</u>. MRLs to cover residues of cyantraniliprole in/on crops and processed commodities are proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRLs for the raw agricultural commodities (RACs).

Limit(s) (MRLs) Application Method/			Residues (ppm)			Currently	
Commodity	Total Application Rate (g ai/ha)	PHI (days)	Min	Max	Experimental Processing Factor	Established MRL (ppm)	Recommended MRL (ppm)
Leaves of root and tuber vegetables (CG2)	440-446	1	2.10	25.00 0	None	0.04	40
Edible-podded legume vegetables (CSG6A)	444-458	1	0.25	0.830	None	None	2.0
Dried shelled pea and bean (CSG6C)	446-457	6-7	0.01	0.670	None	None	1.0
Root vegetable, except sugar beet (CSG1B)	448-454	1	0.02	0.200	None	CSG1A: 0.02	0.4
Dry soybeans	397-411	5-8	<0.0	0.260	None	None	0.4
Succulent shelled pea and beans (CSG6B)	451-460	1	0.01	0.100	None	None	0.2
Low growing berry, except strawberry (CSG13-07H)	457	12-15	<0.0	0.043	None	None	0.08
Peanuts	438-499	13-15	<0.0	< 0.01	None	None	0.01

Based on the dietary burden and residue data, MRLs of 0.1 ppm in fat and meat of cattle, goats, horses, and sheep, 0.2 ppm in milk, and 0.4 ppm in meat byproducts of cattle, goats, horses, and sheep to cover residues of cyantraniliprole are also proposed to replace the current MRL of 0.01 ppm.

Environmental Assessment

No additional risk to the environment resulting from the expansion of DuPont Verimark Insecticide to include root vegetables and to amend the application rate for brassica vegetables is

expected. Environmental concerns are mitigated through adequate statements on the product label and with the addition of label statements regarding runoff.

Value Assessment

In support of the claims for root vegetables except sugar beet (CSG1B), seven trials were submitted on cabbage maggot and two trials were submitted on flea beetles. These trials were conducted on radish and rutabaga in Canada (Quebec, Ontario, and Manitoba). In support of the claim for cabbage maggot in brassica vegetables (CG5) the applicant submitted two trials conducted in the USA; one on broccoli and one on cauliflower.

The submitted value information supports the proposed addition to the Dupont Verimark Insecticide label of in-furrow applications in root vegetables (except sugar beet – CSG1B) with a claim for flea beetles of early season damage reduction at an application rate of 6.75 to 9 mL per 100 m row or 750 to 100 mL per ha (based on 90 cm row spacing) and a claim for control of cabbage maggot at an application rate of 10 to 15 mL product per 100 m row. The submitted value information also supports the addition of a pest claim for control of cabbage maggot in brassica vegetables (CG5) as an in-furrow application at a rate of 10 to 15 mL product per 100 m of row or 1100 to 1700 mL product per ha (based on 90 cm row spacing).

Conclusion

The PMRA has complete a review of available information provide in support of DuPont Verimark Insecticide, and deemed it sufficient to support the amendment of the DuPont Verimark Insecticide label to include root vegetables, and to amend the application rate for brassica vegetables.

References

PMRA Document Number	Reference
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2404837	2011, Cyantraniliprole: Magnitude of the Residues in Cranberries, USA, DACO: 7.4.1.
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2404843	2013, Magnitude of DPX-HGW86 and Metabolite Residues in Legume Vegetables (Soybeans) Following Foliar Applications of DPX-HGW86 100 G/L OD - USA, 2011/2012, DACO: 7.4.1

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2404846	2012, Magnitude of DPX-HGW86 and Metabolite Residues in Leaves of Root and Tuber Vegetables (Turnips and Sugar/Garden Beets) Following Foliar Applications of DPX-HGW86 100 G/L SE - USA, 2011, DACO: 7.4.1			
2404848	2014, Cyantraniliprole: Magnitude of the Residues on Carrot, DACO: 7.4.1			
2404849	2013, Cyantraniliprole: Magnitude of the Residues on Radish, DACO: 7.4.1			
2404736	2014, Cyantraniliprole: Relative Residues for Different Application Method Treatment Regimes, DACO: 7.8			
2404737	2014, Cyantraniliprole Formulated Product Residue Bridging, DACO: 7.8			
2407452	2014, Biological Assessment Dossier for Cyantraniliprole 200 G/L SC - Tier II Crops Canada, 2014, DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 10.3.1, 10.3.3			
2407453	2013, Efficacy of Cyazypyr 200 SC (DuPont Verimark) for the Control of Cabbage Maggot, Flea Beetles and Wireworms on Radish, DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 10.3.1, 10.3.3			
2407455	2013, Efficacy of Cyazypyr 200 SC (DuPont Verimark) for the Control of Cabbage Maggot on Rutabaga and Turnip, DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 10.3.1, 10.3.3			
2407456	2013, Small-Scale Trial (Field) Reports, DACO: 10.2.3.3			
2407457	2011, Efficacy of Cyazypyr (cyantraniliprole) for the Control of Cabbage Maggot on Rutabaga, DACO: 10.2.3.3			
2407459	2013, DACO 10.6 References, DACO: 10.6			
2407460	2013, DACO 10.6 References, DACO: 10.6			
2407461	2013, Radish Efficacy Summary Tables AAFC, DACO: 10.2.3.1			
2407463	2013, Radish Efficacy Summary Tables AAFC, DACO: 10.2.3.1			
2407464	2014, Cabbage Maggot Efficacy Tables - Brassica Vegetables, DACO: 10.2.3.1			

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