

Evaluation Report for Category B, Subcategory 3.6, 3.8, 3.11, 3.12 Application

Application Number: 2010-5715
Application: Add new pests and hosts, change the pre-harvest and re-entry intervals
Product: Reason 500 SC Fungicide Suspension Concentrate
Registration Number: 27462)
Active ingredients (a.i.): Fenamidone
PMRA Document Number: 2193430

Purpose of Application

The purpose of this application was to add the claim of control of downy mildew (*Peronospora parasitica*) on turnip greens, as well as control of early blight (*Alternaria solani*) and late blight (*Phytophthora infestans*) on tomatoes to the Reason 500SC Fungicide Suspension Concentrate label.

Health Assessments

Exposure for mixing, loading and applying Reason 500SC Fungicide Suspension Concentrate to tomatoes and turnip greens was estimated using PHED Version 1.1. Risk estimates calculated for handlers wearing a long-sleeved shirt, long pants and gloves during mixing/loading and a long-sleeved shirt, long pants during application are not of concern.

There is potential for post-application exposure to workers re-entering treated tomatoes and turnip green fields. Risk estimates for workers re-entering treated tomatoes and turnip green fields were estimated using chemical specific dislodgeable foliar residue values. Risk estimates for workers entering treated tomatoes and turnip green fields on the last day of application are not of concern.

Maximum Residue Limits

Previously submitted residue data for fenamidone on brassica leafy vegetables were reassessed to support the use expansion to turnip greens. Canadian MRLs to cover residues of fenamidone in/on tomatoes have been established.

Based on the maximum residues observed in crops treated at exaggerated rates, a maximum residue limit (MRL) to cover residues of fenamidone will be established as shown in Table 1. Residues of fenamidone in processed commodities not listed in Table 1 are covered under the MRLs for the raw agricultural commodities (RACs).

TABLE 1. Summary of Field Trial and Processing Data Used to Establish Maximum Residue Limits (MRLs) for Fenamidone.							
Commodity	Application Method/ Total Application Rate	PHI (days)	Fenamidone Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			Min	Max			
Mustard greens	Broadcast foliar/ 1.2 kg a.i./ha	2	9.338	32.41	Not required	None	55 (for turnip tops)

Following the review of all available data, an MRL is recommended to cover residues of fenamidone in/on turnip tops. Residues of fenamidone in this commodity at the established MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The use on turnip greens and tomatoes are equivalent to currently registered use rates on other labelled crops. PMRA does not anticipate any increased risk to the environment from these uses. Existing environmental label statements are expected to mitigate known risks to aquatic organisms.

Value Assessment

A total of 20 trials were submitted to support the claims for use on turnip greens and tomatoes. Trials were conducted in Canada, the United States, France, and Italy between 1994 and 2009. Trials from France and Italy were deemed acceptable for review based on information submitted as rationales by the applicant demonstrating similarities in environmental conditions during the trials and Canadian growing conditions.

Four trials conducted in France (greenhouse trial) and the United States in 2005 and 2009 were reviewed in support of the claim of control of downy mildew (*Peronospora parasitica*) on turnip greens. Due to a lack of rotational products for this crop, the number of applications was changed to two to mitigate resistance risk. Results from the submitted trials demonstrate good control of disease severity under moderate to high disease pressure after two applications. The claim was supported at the accepted rates with a maximum of two applications.

A scientific rationale was submitted to extrapolate the claims of control of early blight (*Alternaria solani*) and late blight (*Phytophthora infestans*) from potatoes to tomatoes. For these diseases, Reason 500SC Fungicide Suspension Concentrate will be tank mixed with other products registered for the same use. Since the crops have similar architecture and the two diseases are caused by the same pathogens and produce the same symptoms, the rates and spray volumes registered for potato were supported for both diseases on tomato.

Conclusion

The PMRA has reviewed the data provided and has determined the addition of the claim of control of downy mildew (*Peronospora parasitica*) on turnip greens, as well as control of early blight (*Alternaria solani*) and late blight (*Phytophthora infestans*) on tomatoes to the Reason 500 SC Fungicide Suspension Concentrate product label is acceptable.

References

- 1984807 2009, Reason 500 SC fungicide: Control of early and late blight in tomato, DACO: 10.1,10.2.2,10.2.3.1,10.2.3.4,10.3.1,10.3.2
- 1984808 2010, Reason 500SC fungicide (fenamidone) for control of downy mildew (*Plasmopara viticola*) on grape, DACO: 10.1,10.2.3.1,10.3.1,10.3.2
- 1984811 2010, Reason 500SC fungicide (fenamidone) for control of downy mildew (*Bremia lactucae*) on head and leaf lettuce, DACO: 10.1,10.2.3.1,10.3.1,10.3.2,10.4,10.5.1,10.5.2,10.5.3,10.5.4
- 1984814 2010, Reason 500SC fungicide (fenamidone) for control of downy mildew (*Hyaloperonospora parasitica*) on turnip greens, DACO: 10.1,10.2.3.1,10.3.1,10.3.2,10.4,10.5.1,10.5.2,10.5.3,10.5.4
- 1984817 2010, Reason 500SC fungicide (fenamidone) for control of Phytophthora foliar blight (*Phytophthora cactorum*) on ginseng, DACO: 10.1,10.2.3.1,10.3.1,10.3.2

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2012

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.