

Evaluation Report for Category B, Subcategory 3.10, 3.11, 3.12 Application

Application Number: 2006-3665
Application: Category B, Subcategory 3.10 (Changes to product labels - Tank mixes), 3.11 (Changes to Product Labels - New Pests), 3.12 (Changes to Product Labels - New Site or Host).
Product: Quadris Flowable Fungicide
Registration Number: 26153
Active ingredients (a.i.): azoxystrobin
PMRA Document Number: 1584166

Purpose of Application

The purpose of this application is to add a tank mix of Quadris Flowable Fungicide (PCP # 26153, azoxystrobin 250 g/L) with Tilt 250E Fungicide for use on cereal crops (Crop Group 15) to the Quadris label.

Chemistry Assessment

A chemistry assessment was not required as the current application did not involve a change in the product chemistry.

Health Assessments

An assessment of the toxicology was not required as Quadris Flowable Fungicide is a currently registered product and the application to register the tank mix did not involve any change in the formulation or product chemistry.

The tank mix of Quadris Flowable Fungicide and Tilt 250E Fungicide for use on cereal crops is not expected to result in an increase in the occupational exposure to azoxystrobin or propiconazole.

Residue data for azoxystrobin and propiconazole on wheat, barley and corn were submitted to support the use expansion to the cereal crop group (Crop Group 15). In addition, a processing study in treated wheat grain was also submitted and reviewed to determine the potential for concentration of residues of azoxystrobin into processed commodities.

Maximum Residue Limit(s)

As residues of each analyte are less than the respective method limit of quantitation (LOQ) in cereal grains treated according to label directions, and given that maximum residue limits (MRLs) have already been established for some cereal grain commodities, a crop group MRL of 0.03 ppm to cover residues of azoxystrobin and the z-isomer, and a crop group MRL of 0.05 ppm to cover residues of propiconazole (including the metabolites containing the 2,4-dichlorophenyl moiety) in/on crops and processed commodities will be recommended as shown in Table 1. Residues of azoxystrobin and propiconazole in processed commodities will be covered under the recommended MRLs for the raw agricultural commodities (RACs) of cereal grains.

Commodity	Application Method/ Total Application Target Rate (g a.i./ha)	PHI (days)	Residues (ppm)				Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL for Crop Group 15 - Cereal Grains (ppm)
			Azoxystrobin + z-isomer		Propiconazole ¹				
			Min	Max	Min	Max			
Wheat, grain	Foliar spray / azoxystrobin: 75 propiconazole: 125	43-99	<0.02	<0.02	<0.05	<0.05	3X ²	AZY: none PON: 0.05	AZY: 0.03 PON: 0.05
Barley, grain	Foliar spray / azoxystrobin: 75 propiconazole: 125	43-86	<0.02	<0.02	<0.05	<0.05		AZY: none PON: 0.05	
Corn, field, grain	Foliar spray / azoxystrobin: 150 propiconazole: 250	14-15 & 65-113	<0.02	<0.02	<0.05	<0.05		AZY: 0.03* PON: none	
Corn, sweet, grain	Foliar spray / azoxystrobin: 150 propiconazole: 250	14-15	<0.02	<0.02	<0.05	<0.05		AZY: 0.03* PON: none	

¹ Includes the metabolites containing the 2,4-dichlorophenyl moiety.

² Processing factor for azoxystrobin in wheat bran. No azoxystrobin residue concentration was observed in other wheat grain fractions. Processing data reviewed for wheat grain can be translated to other small grain RAC in the Crop Group 15.

* MRL currently established for imported field and sweet corn grain.

Residues of azoxystrobin and propiconazole in these crop commodities at the recommended MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The application rate for Quadris Flowable Fungicide when used in a tank mix with Tilt 250E Fungicide on cereal crops (Crop Group 15) is lower than those currently registered for this product, and therefore, this use should not pose any additional environmental risk. Current buffer zones are adequate to mitigate the potential risk to the aquatic environment resulting from either ground or aerial application spray drift.

This use and other uses for azoxystrobin are registered on a conditional basis until the outstanding data requested in the PMRA Regulatory Note REG2000-15 to address persistence, leaching, and runoff concerns with this active ingredient are reviewed, and uses re-examined in light of this data.

Value Assessment

The proposed claims are control of barley net blotch, barley scald, Septoria leaf spot and tan spot on small-grain cereals as well as for control of rust, Northern corn leaf blight, Southern corn leaf blight, eye spot, and grey leaf spot on corn. These uses are new additions to the active ingredient, azoxystrobin. A rationale with results of a compatibility tests between Quadris and Tilt was provided. In addition, the applicant requested that trials submitted for a related submission to add the same uses to the Quilt Fungicide label (submission number 2006-3668) be considered. The results show that good disease control is achieved when Quilt Fungicide (premix of Quadris + Tilt) is applied to small grain cereals and corn. For small grain cereals, the results support the claims for listed diseases at 0.225 L/ha (56 g ai/ha) Quadris which is the lowest effective rate. For corn, 0.225-0.3 L/ha Quadris was supported since the higher rate provided better disease control under severe disease pressures. Based on the current use pattern of Tilt Fungicide and the review conducted for submission 2006-3668 and 2006-3665, the addition of the proposed tank mix consisting of Tilt (0.5 L/ha) + Quadris (0.225-0.3 L/ha) for use on specific cereal crops is supported from an efficacy and value perspective.

Conclusion

The PMRA can support the addition of the tank mix of Quadris Flowable Fungicide (PCP # 26153, azoxystrobin 250 g/L) with Tilt 250E Fungicide for use on cereal crops (Crop Group 15) to the Quadris label. MRLs of 0.03 ppm and 0.05 ppm for cereal crops are recommended to cover residues of azoxystrobin and the z-isomer, and propiconazole (including the metabolites containing the 2,4-dichlorophenyl moiety), respectively.

References

PMRA Document Number	Reference
1266496	2006, Azoxystrobin plus Propiconazole (premix and tank mix) on Crop Group 15 - Cereals: Rationale for use of available residue data to support a crop group registration., DACO: 7.1
1266497	2006, QUILT - Residue Levels on Wheat (Forage, Hay, Grain and Straw) from Trials Conducted in Canada During 2004, CER 05029/04, DACO: 7.4.1,7.4.2
1266499	2006, QUILT - Residue Levels on Barley (Hay, Grain and Straw) from Trials Conducted with QUILT in Canada During 2004, CER 05030/04, DACO: 7.4.1,7.4.2
1266501	2006, QUILT - Residue Levels on Sweet Corn (Forage and Kernel + Cob with Husk Removed) and Field Corn (Forage, Grain and Fodder) from Trials Conducted with QUILT in Canada During 2004, CER 05031/04, DACO: 7.4.1,7.4.2
1266504	1995, ICIA5504: Residue Levels in Wheat Grain and Milled Process Fractions From a Trial Carried Out in the United States of America during 1994, RJ1979B, DACO: 7.4.5
1266506	1998, Azoxystrobin: Residue Levels on Aspirated Grain Fractions (AGF) Generated from a Wheat Trial Conducted in Idaho During 1997, RR 97-060B, DACO: 7.4.5
REG2000-06	Propiconazole
REG2007-02	Azoxystrobin and <i>Dynasty 100FS Fungicide</i>
REG2000-15	Azoxystrobin

ISSN: 1911-8082

© Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2009

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.