

Evaluation Report for Category B, Subcategory 5.0 Application

Application Number: 2013-0432
Application: New MRL for previously assessed TGAI
Product: Difenoconazole Technical Fungicide
Registration Number: 25631
Active ingredients (a.i.): Difenoconazole
PMRA Document Number : 2428480

Purpose of Application

The purpose of this application was to establish maximum residue limits (MRLs) to cover residues of difenoconazole in/on the following imported commodities: undelinted cotton seeds, citrus fruits (Crop Group 10 - Revised), citrus oil, stone fruits (Crop Group 12-09), mangoes, tree nuts (Crop Group 14-11), dry soybeans and low growing berries, except cranberries (Crop Subgroup 13-07G).

Chemistry, Environmental and Value Assessments

Chemistry, environmental and value assessments were not required for this application.

Health Assessment

Residue data for difenoconazole in/on cotton, citrus fruits (oranges, grapefruits & lemons), stone fruits (tart cherries, sweet cherries, peaches & plums), mangoes, tree nuts (almonds & pecans), soybeans and low growing berries (strawberries) were submitted to support the establishment of MRLs on these imported commodities. Supporting analytical methodology and freezer storage stability data were also reviewed. In addition, processing data on treated cotton, citrus fruits (oranges), stone fruits (plums/prunes) and soybeans were reviewed to determine the potential for the concentration of residues of difenoconazole into processed commodities.

The recommendation for MRLs for difenoconazole was based upon the submitted field trial data, and the guidance provided in the [OECD MRL Calculator](#). MRLs to cover residues of difenoconazole in/on various 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).

TABLE 1. Summary of Field Trial and Processing Data Used to Support Maximum Residue Limit(s) (MRLs)							
Commodity	Application Method/ Total Application Rate	PHI (days)	Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			Min	Max			
Oranges	Broadcast foliar/ 0.556-0.573 kg ai/ha	0	0.0700	0.650	Citrus oil: 46.8X	None	25 for citrus oil & 0.80 for citrus fruits (Crop Group 10 Revised)
Grapefruits	Broadcast foliar/ 0.556-0.576 kg ai/ha	0	0.0700	0.240	Citrus juice: no quantifiable residues	None	
Lemons	Broadcast foliar/ 0.559-0.567 kg ai/ha	0	0.0800	0.240		None	
Tart Cherries	Broadcast foliar/ 0.511-0.524 kg ai/ha	0	0.728	1.01	Not required	None	2.5 for stone fruits (Crop Group 12- 09), including processed prunes
Sweet Cherries	Broadcast foliar/ 0.517-0.528 kg ai/ha	0	0.284	0.716	Not required	None	
Peaches	Broadcast foliar/ 0.512-0.546 kg ai/ha	0	0.0728	1.02	Not required	None	
Plums	Broadcast foliar/ 0.512-0.520 kg ai/ha	0	0.0700	0.600	Prune: 2.57X	None	
Strawberries	Broadcast foliar/ 0.507-0.529 kg ai/ha	0	0.0704	1.22	Not required	None	2.5 for low growing berries, except cranberries (Crop Subgroup 13-07G)
Soybean seeds	Broadcast foliar/ 0.241-0.257 kg ai/ha	0	<0.01	0.152	Refined oil: 0.75X (no concentration observed)	None	0.15
Mangoes	Broadcast foliar/ 0.375 kg ai/ha	7	0.0100	0.0400	Not required	None	0.09
Undelinted cotton seeds	Seed treatment/ 35 g ai/100 kg seed	132 - 189	<0.05	<0.05	No quantifiable residues	None	0.05
Almond Nutmeat	Broadcast foliar/ 0.506-0.517 kg ai/ha	13 - 15	<0.01	<0.01	Not required	None	0.03 for tree nuts (Crop Group 14- 11)
Pecan Nutmeat	Broadcast foliar/ 0.514-0.521 kg ai/ha	14 - 15	<0.01	0.020	Not required	None	

Following the review of all available data, MRLs as proposed in Table 1 are recommended to cover residues of difenoconazole in/on citrus oil, stone fruits (Crop Group 12-09), low growing berries, except cranberries (Crop Subgroup 13-07G), citrus fruits (Crop Group 10 - Revised), dry soybeans, mangoes, undelinted cotton seeds, and tree nuts (Crop Group 14-11). Residues of difenoconazole in these crop commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Conclusion

The PMRA has reviewed the available information for difenoconazole and found the information

sufficient to recommend MRLs, as proposed in Table 1, to cover residues of difenoconazole in/on imported citrus oil, stone fruits (Crop Group 12-09), low growing berries, except cranberries (Crop Subgroup 13-07G), citrus fruits (Crop Group 10 - Revised), dry soybeans, mangoes, undelinted cotton seeds, and tree nuts (Crop Group 14-11).

References

PMRA Document Number	Reference
2267863	2005, Determination of residues of difenoconazole (CGA 169374) in agricultural samples by LC/MS/MS, DACO: 7.2.1
2267868	1998, Difenoconazole and CGA173506 - Magnitude of the residues in or on cotton, DACO: 7.2.1, 7.2.2, 7.4.1, 7.4.5, 7.4.6
2267872	2006, Score - Residues Magnitude of difenoconazole in mango after foliar treatment- Brazil 2003, DACO: 7.4.1, 7.4.2
2267875	2008, Difenoconazole - Magnitude of the residues in or on pecans, DACO: 7.4.1, 7.4.2, 7.4.5
2267878	2008, Difenoconazole - Magnitude of the residues in or on almonds, DACO: 7.4.1, 7.4.5, 7.4.6
2267879	2009, Difenoconazole - Magnitude of the residues in or on soybeans, DACO: 4, 6, 7, 7.4.1, 7.4.2, 7.4.5
2267881	2009, Difenoconazole - Magnitude of the residues in or on sweet or tart cherry, peach, and plum as representative commodities of fruit, stone, group 12, DACO: 7.4.1, 7.4.2, 7.4.5
2267885	2009, Difenoconazole - Magnitude of the residues in or on strawberries, DACO: 7.4.1, 7.4.2
2267886	2008, Difenoconazole - Magnitude of the residues in or on fruit, citrus, group 10, DACO: 7.4.1, 7.4.2, 7.4.5

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