

Evaluation Report for Category B, Subcategory 3.12 Application

Application Number: 2009-0586
Application: Changes to product labels – New site or host
Product: Movento 150 OD Insecticide
Registration Number: 28954
Active ingredients (a.i.): Spirotetramat
PMRA Document Number: 1844454

Purpose of Application

The purpose of this application is to expand the registration of Movento 150 OD Insecticide to include the control of aphids and whiteflies on soybean and legume vegetables (Crop Group 6) at a rate of 44-66 g a.i./ha. This application included the establishment of maximum residue limits (MRLs) for soybean and legume vegetables and is a joint review between the United States, Canada, and Austria.

Health Assessments

An occupational risk assessment was not necessary for Movento 150 OD because the requested uses fit within the existing use pattern for spirotetramat. Exposure to the mixer/loader/applicator, as well as the post-applicator, is not expected to be greater than the current exposure from the registered product.

To support the establishment of MRLs on soybean and legume vegetables, residue data for spirotetramat were evaluated for soybean seed, snap bean, snow pea, garden pea, lima bean, dried bean seed, and dried pea seed. Following review of all available data, MRLs are being proposed for soybean seed at 5.0 ppm, and legume vegetables, succulent or dried (Crop Group 6, except soybean), at 2.5 ppm.

Based on the maximum residues observed in crops treated according to domestic label directions, the MRLs to cover residues of spirotetramat and related metabolites in/on crops will be established as shown in Table 1. Residues of spirotetramat in processed commodities not listed in Table 1 are covered under established MRLs for the raw agricultural commodities (RACs).

TABLE 1. Summary of Field Trial Data Used to Establish Maximum Residue Limit(s) (MRLs)						
Commodity	Application Method/Total Application Rate (g a.i./ha)	PHI (days)	Total Spirotetramat Residues ¹ (ppm)		Experimental Processing Factor	Recommended MRL (ppm)
			Min	Max		
Soybean seed	Broadcast foliar/174-183	18-21	<0.055	2.67	Soybean Meal 1.4	5.0
Vegetables, legume, Crop Group 6 (except soybean)	<u>Dry Bean Seed</u> Broadcast foliar/177-181	6-7	<0.055	1.23	--	2.5
	<u>Snap Bean</u> Broadcast foliar/177-182	1	0.12	0.83	--	
	<u>Snow Pea</u> Broadcast foliar/177-182	1	0.58	1.32	--	
	<u>Dried Pea Seed</u> Broadcast foliar/173-182	7	0.063	1.05	--	
	<u>Lima Bean</u> Broadcast foliar/177-178	1	0.10	0.44	--	
	<u>Garden Pea</u> Broadcast foliar/175-178	1	0.44	0.76	--	

¹ Total residues of spirotetramat, BYI08330-enol, BYI08330-ketohydroxy, BYI08330-mono-hydroxy, and BYI08330-enol-glucoside, expressed in parent equivalents.

Following the review of all available data, the MRLs for the crops noted in Table 1 above are recommended to cover residues of spirotetramat and related metabolites. Residues of spirotetramat in these crop commodities at the established MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Value Assessment

Twelve efficacy trials conducted in the United States, Canada, France and Germany demonstrated that Movento 150OD Insecticide and Movento 240SC Insecticide (submission number 2009-0585) are biologically equivalent; therefore, all data were considered in support of both products. The data demonstrated that spirotetramat mixed with a non ionic surfactant reduced aphid populations faster when compared to spirotetramat only treatments. Eight of the twelve submitted trials evaluated multiple rates of spirotetramat for control of aphids. Rates of 44 g a.i./ha demonstrated higher levels of aphid control than 22 g a.i./ha between 1 and 3 days after treatment. By 7 days after treatment, all rates demonstrated > 80% control. No data were provided to support a claim of whiteflies on legumes; however, a rate of 44-66 g a.i./ha was supported on the basis that aphids and whiteflies are labelled at the same rate on other field vegetables. There was no evidence of phytotoxicity in any of the trials.

Chemistry and Environmental Assessment

Chemistry and environmental assessments were not required for this application.

Conclusion

The PMRA has completed an assessment of available information for Movento 150 OD Insecticide and has found the information sufficient to support the addition of soybean and legume vegetables to the label, as well as to establish domestic MRLs.

References

PMRA Document Number	Reference
1721279	2009, Reference list of the efficacy data on the plant protection product for spirotetramat OD 150 and SC240 - sorted by Annex points and authors, DACO: 10.6,11.1, Document L
1721280	2009, Reference list of the efficacy data on the plant protection product for spirotetramat OD 150 and SC240 - sorted by Annex points and authors, DACO: 10.6,11.1, Document L
1721289	2008, Movento 240 SC and Movento 150 OD insecticides: Data to support the control of aphids in legume crops, DACO: 10.1,10.2.3.1,10.2.3.4,10.3.1,10.3.2, IIIA 6.1.3
1721296	2009, Spirotetramat 150 OD and 240 SC - Magnitude of the residue on edible podded legume vegetables (crop group 6a), DACO: 7.4.1,7.4.2,7.4.6, IIIA 8.3.1
1721297	2009, Spirotetramat 150 OD and 240 SC - Magnitude of the residue on succulent, shelled pea and bean (crop subgroup 6B), DACO: 7.4.1,7.4.2,7.4.6, IIIA 8.3.1
1721298	2009, Spirotetramat 150 OD and 240 SC - Magnitude of the residue on dried peas and beans (crop subgroup 6C) and foliage of legume vegetables (crop subgroup 7A), DACO: 7.4.1,7.4.2,7.4.6, IIIA 8.3.1
1721299	2009, Spirotetramat 150 OD and 240 SC - Magnitude of the residue in/on soybean, DACO: 7.4.1,7.4.2,7.4.6, IIIA 8.3.1
1721325	2009, Spirotetramat 150 OD - Magnitude of the residue in/on soybean processed commodities and aspirated grain fractions, DACO: 7.4.5,8.4.1, IIIA 8.5.1

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