

## Evaluation Report for Category B , 3.2 Subcategory Application

**Application Number:** 2008-3146  
**Application:** Change to Product Label – Application Timing  
**Product:** Converge Flexx Herbicide  
**Registration Number:** 29071  
**Active ingredients (a.i.):** Isoxaflutole  
**PMRA Document Number:** 1687916

### Purpose of Application

The purpose of this application is to add the option of a post-emergence application to field corn, up to the 3 leaf stage, to the Converge Flexx Herbicide (240 g isoxaflutole/L).

### Value Assessment

Efficacy data were submitted from 22 small scale field plots conducted in 2005 and 2006 at locations across Ontario. The herbicide treatments were applied using small plot application equipment and were within the growth stage range indicated on the label. The efficacy of Converge Flexx Herbicide was visually assessed as percent weed control and compared to an untreated weedy check. Observations were made up to three times throughout the growing season.

The submitted efficacy data supports the claim of control for common lamb's quarters, common ragweed, large and smooth crabgrass, dandelion (seedling) eastern black nightshade, plantain (seedling), red root pigweed, tall waterhemp, velvetleaf, wild mustard, witch grass, wormseed mustard with the application of 0.33 L Converge Flexx Herbicide/ha (79 g isoxaflutole). The data also supports the claim of control for the above weeds plus barnyard grass and green foxtail with the application of 0.44 L Converge Flexx Herbicide/ha (105 g isoxaflutole).

Crop tolerance data were submitted from 34 small plot trials testing field corn conducted in 2005 and 2006 at locations across Ontario and Quebec. Some trials contained treatments at the 2x rate of Converge Flexx Herbicide. Crop injury was visually assessed up to 3 times during the growing season. Crop yield, expressed as either a percentage of the weed free check or as a percentage of the commercial standard, was reported in 12 dedicated crop tolerance trials.

Crop injury to field corn treated with Converge Flexx Herbicide applied alone or in tank mixture with atrazine and or glyphosate was always less than 5%. Crop yield was comparable to registered commercial treatments. The submitted phytotoxicity and yield data demonstrate an adequate margin of safety for application of Converge Flexx to field corn up to the 3 leaf stage.

### Health Assessments

Metabolism and residue data for isoxaflutole in field corn were submitted to support the revision of the isoxaflutole residue definition in plants and the early post-emergence application of Converge Flexx Herbicide. The submitted metabolism data can support the revision of the residue definition in plants to isoxaflutole and RPA 202248 from isoxaflutole, RPA 202248 and RPA 203328 expressed as isoxaflutole equivalents.

### Maximum Residue Limit

Based on the maximum residues observed in field corn treated according to label directions and the revised residue definition, the maximum residue limit (MRL) to cover residues of isoxaflutole and RPA 202248 in/on field corn grain will be amended as shown in Table 1. Residues of isoxaflutole and RPA 202248 in processed commodities not listed in Table 1 are covered under the established MRL for the raw agricultural commodity (RAC).

<b>TABLE 1. Summary of Field Trial and Processing Data Used to Establish Maximum Residue Limit (MRL)</b>							
<b>Commodity</b>	<b>Application Method/ Total Application Rate (g a.i./ha)</b>	<b>PHI (days)</b>	<b>Residues (ppm)</b>		<b>Experimental Processing Factor</b>	<b>Currently Established MRL</b>	<b>Recommended MRL</b>
			<b>Min</b>	<b>Max</b>			
Field corn grain	106	110	0.01	0.01	N/A	0.20 ppm	0.02 ppm

Following the review of all available data, an MRL of 0.02 ppm for field corn grain is recommended to cover residues of isoxaflutole and RPA 202248. Residues of isoxaflutole and RPA 202248 in field corn grain at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

### Chemistry and Environmental Assessment

Converge Flexx Herbicide is currently registered for use in field corn, therefore, chemistry and environmental assessments were not required.

### Conclusion

The use of Converge Flexx Herbicide as a post-emerge application to field corn up to the 3 leaf stage of the crop is acceptable for registration.

## References

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- 1409071 1998, Method of analysis for the determination of isoxafluote (RPA 201772) and its metabolites (RPA 202248 and 203328) in raw agricultural commodities and processed foods (Revision 1), CAL#019-03 (Revision 1), DACO: 7.2.1
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- 1605538 2006, The Metabolism of [phenyl-UL-14C]-Isoxaflutole in Corn with Post-Emergence Application, M-268739-01-2, DACO: 6.3
- 1606383 2008, Statement from Bayer CropScience on the residue definition of Isoxaflutole, M-302201-01-1, DACO: 7.1 CBI
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- 1409072 ACOs 10.2.33, 10.3.2, 10.3.3, 10.4, 10.5.1, 10.5.2, 10.5.3, 10.5.4102000014305 SC herbicide - New safener in formulation with isoxaflutole herbicide on field corn- Canadian Value Package. 509pp.

ISSN: 1911-8082

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