

## **Evaluation Report for Category B, Subcategory 3.10, 3.12, 3.5 Application**

Application Number:	2013-2108
Application:	New or Changes to Product Labels-Tank Mixes, New or Changes
	to Product Labels-New Site or Host, New or Changes to Product
	Labels-Rotational Crops\Plantback Interval
Product:	Converge Pro Suspension Herbicide
<b>Registration Number:</b>	27446
Active ingredients (a.i.):	Isoxaflutole
<b>PMRA Document Number</b>	: 2416454

#### **Purpose of Application**

The purpose of this application was to include isoxaflutole tolerant soybean as a new host crop for pre-plant surface and pre-emergence applications of Converge Pro Suspension Herbicide alone at labeled rates or in tank mix with a glyphosate herbicide and to reduce the labeled recropping interval of winter wheat from four months to three months.

#### **Chemistry Assessment**

Chemistry assessment was not required for this application.

#### **Health Assessments**

Converge Pro Suspension Herbicide for use on isoxaflutole tolerant soybeans fits within the registered use pattern for isoxaflutole. The potential exposure to mixers, loaders, applicators and workers entering treated fields is not expected to exceed the current exposure to registered products. No risks of concern are expected when all label directions are followed.

No new residue data for isoxaflutole in isoxaflutole-tolerant soybean were submitted with the current submission. Hence, previously reviewed residue data from field trials conducted on isoxaflutole-tolerant soybean were reassessed in the framework of this submission. In addition, processing data on treated soybeans were reassessed to determine the potential for concentration of residues of isoxaflutole into processed commodities. These data were found to be adequate to support the proposed changes to the label of Converge Pro Suspension Herbicide.

More specifically, the amendments regarding the addition of isoxaflutole-tolerant soybean as a new host; the reduction to the rotational crop interval for winter wheat from four months to three months; and the substitution of the list of glyphosate tankmix partner trade names with the more generic term "glyphosate" can be supported from a food residue perspective.



## **Maximum Residue Limit**

Residues of isoxaflutole and the metabolite RPA 202248 will be covered by the MRL of 0.05 ppm previously established in/on dry soybeans.

Following the review of all available data, the use of isoxaflutole as a preplant or pre-emergent ground application to control broadleaf weeds in isoxaflutole-tolerant soybeans can be supported from a food residue exposure point of view. The revision of the rotational crop interval for winter wheat from four months to three months is also acceptable. Residues of isoxaflutole and the metabolite RPA 202248 in these commodities at the previously established MRL of 0.05 ppm will not pose an unacceptable health risk to any segment of the population, including infants, children, adults and seniors.

## **Environmental Assessment**

The addition of isoxaflutole tolerant soybeans to the list of treated crops for Converge Pro Suspension Herbicide is not expected to pose any additional risk to the environment over currently registered uses on field corn. Isoxaflutole is a fully registered active ingredient with no outstanding environmental data requirements. To assist with the human health exposure assessment, levels of isoxaflutole plus the major transformation product RPA 202248 were modelled in drinking water sources and a review of ground and surface water monitoring data available from the United States was conducted. No new environmental data were originally submitted with this application, however additional water monitoring data from the United States were considered.

Environmental mitigation statements currently on the product label for field corn use are adequate to mitigate potential risks from use on isoxaflutole tolerant soybeans.

## Value Assessment

Isoxaflutole tolerant soybean (i.e. IFT-tolerant soybean) is a new genetically modified soybean variety with two herbicide tolerance traits, which confer tolerance to isoxaflutole and glyphosate.

Injury (visually assessed as a percentage relative to an untreated check) to 14 IFT-tolerant soybean varieties following applications of Converge Pro Suspension Herbicide at the labeled 1 x rate of 105 g a.i./ha and the 2 x rate of 210 g a.i./ha was not detectable or minor. Yield data, expressed as % of an untreated weed-free control, confirmed that IFT-tolerant soybean exhibited an adequate margin of crop safety to Converge Pro Suspension Herbicide applied in accordance with the label directions.

Injury to winter wheat three months after the application of Converge Pro Suspension Herbicide at the labeled 1 x and the 2 x application rates was not detectable. Yield data, expressed as % of an untreated control, confirmed that winter wheat as a rotational crop with a three month recropping interval exhibited an adequate margin of crop safety to Converge Pro Suspension Herbicide applied in accordance with the label directions. Inclusion of IFT-tolerant soybean on the Converge Pro Suspension Herbicide label will give growers enhanced flexibility to utilize dual modes of action in burndown and pre-emergence applications to achieve broad spectrum control of both grasses and broadleaf weeds, including a number of weed species that are resistant to Group 2, 5, and 9 herbicides.

Winter wheat is an important rotational crop following soybeans. Reduction of the re-cropping interval of winter wheat from four months to three months allows growers further flexibility in terms of rotational cropping options.

## Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided in support of the product, Converge Pro Suspension Herbicide, and has found the information sufficient to add a new host crop and reduce the labeled re-cropping interval of winter wheat from four months to three months, with Isoxaflutole.

References PMRA Reference Doc No.

2293185: March 20, 2013. Converge Pro Suspension Herbicide (isoxaflutole): For use in isoxaflutole-tolerant soybeans. Authored by Bayer CropScience. DACO 10. pp 111.

#### **Additional Information Considered**

1857396.	February 2004. United States Department of Agriculture (USDA). Pesticide
	Data Program Annual Summary, Calendar Year 2002. Science and
	Technology Programs, Agricultural Marketing Service, USDA. DACO 8.6.
2312778.	May 2012. United States Department of Agriculture (USDA). Pesticide Data
	Program Annual Summary, Calendar Year 2010. Science and Technology
	Programs, Agricultural Marketing Service, USDA. DACO 8.6.
2312780.	February 2013. United States Department of Agriculture (USDA). Pesticide
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	Technology Programs, Agricultural Marketing Service, USDA. DACO 8.6.
2385755.	2014. United States Geological Survey (USGS). USGS National Water
	Quality Assessment (NAWQA) program surface water and groundwater
	monitoring data for isoxaflutole. Downloaded January 22, 2014.
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