

## Evaluation Report for Category B, Subcategory 3.4 and 3.5 Application

**Application Number:** 2011-2432  
**Application:** Changes to product label: Application method, rotational crops/plantback interval  
**Product:** Inspire Fungicide  
**Registration Number:** 30004  
**Active ingredients (a.i.):** Difenoconazole  
**PMRA Document Number:** 2199164

### Background

Inspire Fungicide (Registration number 30004; guarantee of 250 g difenoconazole/L) was first granted a conditional registration in Canada in 2011 as a foliar treatment for control or suppression of a variety of diseases on several fruit and vegetable crops. The detailed review for difenoconazole and Inspire Fungicide can be found in the Evaluation Report ERC2011-06, *Difenoconazole*.

### Purpose of Application

The purpose of this application was to amend the Inspire Fungicide label to add aerial application on potatoes and to amend the rotation crop statement to 60 days after application (depending on the crop).

### Chemistry Assessment

A chemistry assessment was not required for this application.

### Health Assessments

A toxicology assessment was not required for this application.

Residue data on file support the addition of aerial application to potatoes, and the amendment of the crop rotation statement to indicate a new plant-back interval of 60 days on the Inspire Fungicide label. This use of Inspire Fungicide is not expected to increase the magnitude of difenoconazole residues in/on the crops. Therefore, the dietary exposure to difenoconazole is not expected to increase and will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

A health risk assessment was conducted for chemical handlers and postapplication workers for the aerial use of Inspire Fungicide on potatoes. No risks of concern are expected when workers follow the label directions and wear the personal protective equipment identified on the label.

### **Environmental Assessment**

A risk to terrestrial habitats was identified based on the newly submitted data for seedling emergence and vegetative vigour. The calculated risk quotient (RQ) of 3.6 for aerial application to potatoes indicates that the level of concern (LOC) was exceeded ( $RQ > 1$ ). Hence, mitigative measures are required in the form of spray buffer zones for the protection of non-target terrestrial vegetation. For the addition of aerial application on potatoes, spray buffer zones were also required for the protection of aquatic habitats.

### **Value Assessment**

The applicant referenced a comprehensive review of trials testing ground versus aerial pesticide applications (fungicide, herbicide, insecticide) for various products, crops, and formulation types. The results of these trials indicate that the efficacy resulting from aerial application was comparable to that of ground application. Additional information was requested to support the claim for aerial application.

The applicant submitted a rationale based on a similar precedent fungicide product currently registered for aerial application to potatoes at the same or similar dilution volumes. These products are known to be effective and have similar characteristics (formulation type, partially systemic, persistence in the environment). It was also noted that aerial application to potatoes is registered on the Inspire Fungicide label in the USA to control the same disease. The recommended spray volume is similar to the spray volume proposed for use in Canada.

Based on the information provided by the applicant and the current USA registration for the same use, it is accepted that aerial application of Inspire Fungicide to potatoes at the registered rates using a spray volume of 45 L/ha will control early blight with no reduction in efficacy when compared to ground application. The claim is supported as proposed.

The amendment of the rotational crop statement does not affect efficacy; there is no objection to the amendment of this statement.

### **Conclusion**

The PMRA has completed an assessment of available information for Inspire Fungicide and has found the information sufficient to amend the Inspire Fungicide label to add aerial application on potatoes and a revised rotation crop statement.

## References

- 2142307 2011, Rationale to support the addition of aerial application on potatoes on the Inspire Fungicide Label, DACO: 10.2.3.1
- 2142300 2011, Difenconazole – Toxicity Effects on the Vegetative Vigour, DACO: 9.8.4
- 2142305 2011, Difenconazole – Toxicity Effects on the Seedling Emergence of Two Species of Plants, DACO: 9.8.4

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