

## Evaluation Report for Category B, Subcategory 3.4 and 3.12 Application

**Application Number:** 2015-0597  
**Application:** New or Changes to Product Labels – New site and application method  
**Product:** Edge Herbicide  
**Registration Number:** 20980  
**Active ingredients (a.i.):** Ethalfluralin (EFR)  
**PMRA Document Number :** 2535275

### Purpose of Application

The purpose of this application was to amend the registration of Edge Herbicide to include (1) a pre-plant surface application method (without incorporation) in a direct-seeding system and (2) application to soybeans, dry common beans (white and kidney), and canola grown in Eastern Canada.

### Chemistry Assessment

A chemistry assessment was not required for this application.

### Health Assessments

A toxicological was not required for this application.

No new residue data for ethalfluralin were submitted to support the addition of direct-seeding systems and the extension of the use on soybeans, dry common beans and canola to Eastern Canada for the registered end-use product Edge Herbicide. Edge Herbicide is registered for use with preplant soil incorporated applications on various crops, including soybeans, dry common beans and canola in Western Canada. The maximum residue limits (MRLs) currently established for residues of ethalfluralin, and the default MRL of 0.1 ppm where no specific MRL has been established, are considered adequate to cover the expected residue levels generated by the use of Edge Herbicide with direct-seeding systems on various crops, and on soybeans, dry common beans and canola in Eastern Canada. Dietary exposure to ethalfluralin is not expected to increase and will not pose an unacceptable health risk to any segment of the population, including infants, children, adults and seniors.

The amendments requested in this application are not expected to result in potential occupational or bystander exposure over the registered uses of ethalfluralin. No health risks of concern are expected when workers follow label directions and wear personal protective equipment as stated on the label.

### Environmental Assessment

There is no additional environmental risk expected, when compared to previously registered uses, from applying Edge Herbicide by a direct-seeding system at the maximum rate of 1.4 kg ai/ha for crops grown in Western Canada or at the maximum rate of 1.1 kg ai/ha for the proposed crops grown in Eastern Canada.

### **Value Assessment**

There was a major shift away from the conventional-tillage towards a direct seeding cropping system in the late 1990s. Some of the benefits of a direct-seeding system include: increased water filtration and soil water retention, improved soil biological activity and soil organic matter content, saved equipment and fuel costs, etc. The inclusion of the pre-plant surface application method on the Edge Herbicide label provides farmers an effective tool for pre-plant weed management in no- and minimum-tillage farming systems. Furthermore, the use expansion to include Eastern Canada on the Edge Herbicide label will fill the gap left by other discontinued ethalfluralin herbicides for Eastern Canada growers in regards to them not having access to ethalfluralin herbicides.

Data from a total of 51 field trials conducted in the Prairie Provinces between 1993 and 1995 demonstrated that control or suppression of labelled weeds with a pre-plant surface application was acceptable and comparable to that with a pre-plant incorporated application of Edge Herbicide at the same rates. Crop injury to canola and field pea was not observed for either the pre-plant surface or the pre-plant incorporated application of Edge Herbicide in any trials. Therefore, the inclusion of a pre-plant surface application method in a direct seeding cropping system was supported. Furthermore, a submitted scientific rationale supported the use expansion of Edge Herbicide to include the use on soybeans, dry common beans, and canola grown in Eastern Canada.

### **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided in support of the product, Hedge Herbicide, and has found the information sufficient to include a pre-plant surface application method (without incorporation) in a direct-seeding system and application to soybeans, dry common beans (white and kidney), and canola grown in Eastern Canada.

### **References**

PMRA Document Number	Reference
2502557	2014, Small scale field trial reports for Edge Herbicide, DACO: 10.2.3.3.
2524589	2015, Edge Herbicide (20980 PCPA): Rationale to have Eastern Canada crops added to Edge Herbicide label, DACO: 10.2.3.
2502554	2015, Use Scenario, DACO: 5.1, 5.2

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