Health Canada Santé Canada

Evaluation Report for Category B, Subcategory 3.12 Application

Application Number:	2017-6175
Application:	B.3.12: New Site or Host
Product:	Goldwing Herbicide
Registration Number:	32112
Active ingredients (a.i.):	MCPA (present as esters) and pyraflufen-ethyl
PMRA Document Number:	**2948355**

Purpose of Application

The purpose of this application was to add dried beans, chickpeas, and lentils (including Crop Group 6C) as host crops for control of labelled weeds to Goldwing Herbicide label.

Chemistry Assessment

Chemistry assessment was not required for this application.

Health Assessments

The occupational exposure and risks from the addition of dried beans, chickpeas and lentils to the Goldwing Herbicide label were assessed. No health risks of concern are expected from these uses, provided that workers follow the label directions and wear the personal protective equipment identified on the label.

For pyraflufen-ethyl, no new residue data in dry shelled peas and beans were submitted to support the use expansion of this active ingredient on commodities belonging to crop subgroup (CSG) 6C on the Goldwing Herbicide label. Previously reviewed residue data from field trials for pyraflufen-ethyl conducted in/on dried peas and beans were re-assessed in the framework of this petition.

For MCPA, new residue data from field trials conducted in Canada were submitted to support the use of Goldwing Herbicide on dried shelled peas and beans (CSG 6C). MCPA was applied to dried peas and beans at slightly exaggerated rates, and harvested according to label directions.

Maximum Residue Limit for MCPA

The recommendation for maximum residue limit (MRL) for MCPA was based upon the submitted field trial data, and the guidance provided in the OECD MRL Calculator. The MRL to cover residues of MCPA in/on crops is proposed as shown in Table 1.

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TABLE 1 Summary of Field Trial Data Used to Support the Maximum Residue Limit (MRL) for MCPA.

Commodity	Application Method/ Total Application Rate (g a.e./ha)	PHI (days)	Residues (ppm)		Currently Established MRL (ppm)	Recommended MRL (ppm)
			LAFT	HAFT		
Dried peas	Soil applied broadcast, pre-emergent to crop / 392-421	93-113	<0.01	<0.01	0.1	0.1 for all commodities included in CSG 6C
Dried beans	Soil applied broadcast, pre-emergent to crop / 382-412	104-143	<0.01	<0.01	None	

LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial; PHI = Pre-harvest Interval; CSG 6C: Dried shelled peas and beans (except soybeans)

Following the review of all available data, an MRL of 0.1 ppm, as proposed in Table 1, is recommended to cover residues of MCPA in/on commodities belonging to CSG 6C. Residues of MCPA and pyraflufen-ethyl in these crop commodities at the proposed and established MRLs will not pose an unacceptable health risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The amendment to the label of Goldwing Herbicide to include dried beans, chickpeas, and lentils at a maximum rate of 660 mL/ha (277.2 g a.i./ha MCPA and 8.91 g a.i./ha pyraflufen-ethyl), with one application per year, is within the currently registered rates for this product on similar crop groups.

Value Assessment

The registration of Goldwing Herbicide on dried bean, chickpea, and lentil as host crops will provide Canadian growers another option to control broadleaf weeds, especially volunteer canola, in these crops prior to seeding or post seeding prior to the crop emergence.

Value information submitted for review consisted of a scientific rationale and data from small-plot field trials. The value information demonstrated that chickpea and lentil can be expected to have adequate margins of crop tolerance to Goldwing Herbicide applied in accordance with the label instructions.

The value information obtained from chickpea and lentil with a pre-emergent application of Goldwing Herbicide can be extrapolated to dried bean based on herbicide modes of action for pyraflufen-ethyl and MCPA, i.e., pyraflufen-ethyl (Group 14) is a contact herbicide with limited translocation within the plant while MCPA Ester (Group 4) has limited soil residual activity.

Conclusion

The PMRA has reviewed the information provided in support of the addition of dried beans, chickpeas, and lentils (including Crop Group 6C) to the product label. Based on the results of this review, dried beans, chickpeas, and lentils (including Crop Group 6C) is acceptable to appear on the Goldwing Herbicide label.

References

PMRA #

2822667 2017, A rationale based on trial data to support the use of Goldwing Herbicide (pyraflufen-ethyl + MCPA ethyl-hexyl ester) for broadleaf weed control in a pre-seeding application and evaluate the crop safety of GoldWing Herbicide in a pre-seed or pre-emergent application in Crop Group 6C. DACO: 10.1, 10.2, 10.2.3, 10.2.3.1, 10.2.3.3(B), 10.3, 10.3.1, and 10.3.2.

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