

Evaluation Report for Category B, Subcategory 3.5, 3.12 Application

Application Number: 2018-6223
Application: B.3.12: New Site or Host
B.3.5: Rotational Crops\Plantback Interval
Product: BUTEO start 480 FS
Registration Number: 31451
Active ingredients (a.i.): Flupyradifurone
PMRA Document Number: 3101980

Purpose of Application

The purpose of this application was to add canola and amend the plant-back interval for sugar beets from 12 months to 6 months on the BUTEO start 480 FS label.

Chemistry Assessment

Chemistry assessment was not required for this application.

Health Assessments

The occupational exposure and risk from the addition of the use on canola seed to the BUTEO start 480 FS label was assessed. No risks of concern are expected from the use, provided that workers follow the label directions and wear the personal protective equipment identified on the label.

Residue data from field trials conducted in Canada and the United States were submitted to support the domestic use of flupyradifurone on rapeseeds (crop subgroup 20A). Flupyradifurone was applied to canola at 5.6-6.4 fold GAP. Seed was harvested according to label directions. In addition, a processing study in treated sugar beets was reviewed and processing studies in soybean and cottonseed were also reassessed in the framework of this submission to determine the potential for concentration of residues of flupyradifurone into canola processed commodities.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for [flupyradifurone](#) was based upon the submitted field trial data, and the guidance provided in the [OECD MRL Calculator](#). An MRL to cover residues of flupyradifurone in/on rapeseeds (revised) (crop subgroup 20A) is proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRL for the raw agricultural commodity (RAC).

Table 1. Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits (MRLs)

Commodity	Application Method/ Total Application Rate (g a.i./ha)	PHI (days)	Residues (ppm)		Experimental Processing Factor	Currently Established MRL (ppm)	Recommended MRL (ppm)
			LAFT	HAFT			
Rapeseeds (Crop Subgroup 20A)							
Canola	Seed + Foliar/ 254-289	60- 170	<0.010	0.024	N/A	N/A	0.03

LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial

Based on the dietary burden and residue data, MRLs of 0.1 ppm for fat and 0.07 ppm for milk to cover residues of flupyradifurone are also proposed to replace the current MRLs of 0.06 ppm for each animal commodity.

Following the review of all available data, MRLs as proposed above are recommended to cover residues of flupyradifurone. Residues in these crop/livestock commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

No additional risk to the environment is expected from the use of BUTEO start 480 FS to include seed treatment on canola that cannot be mitigated through labelling. The expansion fits within the registered use pattern for flupyradifurone. The label contains the required environmental hazard statements and directions for use.

Value Assessment

Efficacy data from a total of 11 field trials conducted in British Columbia, Saskatchewan, Manitoba, and France demonstrated that applications of 625-1042 mL BUTEO start 480 FS (300-500 g flupyradifurone) per 100 kg of canola seed provides early season protection from flea beetle damage. Yields were significantly higher than from untreated canola in all six trials in which yield was measured. Flupyradifurone is a new active ingredient for this use, which is important for resistance management.

Conclusion

The PMRA has reviewed the information provided to support the addition of canola and to amend the plant-back interval for sugar beets. Based on the results of this review, the addition of canola and the amended plant-back interval for sugar beets are acceptable.

References

PMRA#	Reference
2938184	2018, Value assessment of BYI 02960 480 FS (flupyradifurone) for control of flea beetles in canola, DACO: 10.1, 10.2.3.1, 10.2.3.3, 10.3.1, 10.3.2, 10.5.1, 10.5.2, 10.5.3, 10.5.4
2938186	2018, Value assessment of BYI 02960 480 FS (flupyradifurone) for control of flea beetles in canola: Compilation of trial reports, DACO: 10.2.3.3
2938048	2018, BYI 02960 200 SL and BYI 02960 480 FS - Magnitude of the residue in/on canola, DACO: 7.4.1,7.4.2
2938079	2018, Flupyradifurone Request for six-month plant-back interval to sugar beet following the application at the maximum seasonal application rate to primary crops, DACO: 7.4.4
2938082	2012, Processing study - Determination of the residues of BYI 02960 in/on beet, sugar and processed fractions (body, washed; washings; pulp; raw juice; thin juice; cake, lime; thick juice; molasses; raw sugar; white sugar; pulp, extracted, wet; press liquor; pulp, extracted, pressed; pulp, extracted, dry; pulp, extracted, ensiled; and refined sugar) after spraying and incorporation of BYI 02960 SL 200 in the field in Germany, DACO: 7.4.5
2938083	2018, Flupyradifurone - Extrapolation of soybean and cotton processing data to canola processed commodities, DACO: 7.4.5

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