

Evaluation Report for Category B, Subcategory 3.10, 3.11, 3.12 Application

Application Number: 2021-6659
Application: Changes to Product Labels – Tank Mixes, New Pests and New Site or Host
Product: BCP258H Herbicide
Registration Number: 34031
Active ingredient (a.i.): Pyridate
PMRA Document Number: 3439001

Purpose of Application

The purpose of this application was to amend the product label for BCP258H Herbicide to add in-crop application to dry peas, pre-emergent applications to soybeans, a new weed, and tank mix with metribuzin for use on dry peas.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessment

The occupational exposure and risk from the addition of the post-emergent use on dry peas and pre-plant/pre-emergent use on soybeans to the BCP258H Herbicide label were assessed. No health risks of concern are expected from the uses, provided that workers follow the label directions and wear the personal protective equipment identified on the label.

Residue data from dry pea and soybean field trials conducted in Canada and the United States were submitted to support the use of BCP258H Herbicide on dry peas and soybeans. Pyridate, formulated as a 600 g/L emulsifiable concentrate, was applied post-emergence to dry peas and soybeans at the maximum seasonal rates, and harvested according to label directions. Previously reviewed residue data from field trials conducted with pyridate on dry field peas and chickpeas at the maximum seasonal rate were also reassessed in the context of the current application.

Maximum Residue Limits

The recommendation for proposed maximum residue limits (MRLs) for pyridate was based upon the submitted and on-file field trial data, and the guidance provided in the [OECD MRL Calculator](#). MRLs to cover residues of pyridate and the metabolite pyridafol (free and conjugated), expressed as pyridate equivalents, in/on crops are proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRLs for the raw agricultural commodities (RACs).

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)	Proposed MRL (ppm)
			LAF T	HAF T			
Dry field pea	Broadcast foliar/ 900	58 – 85	<0.05	<0.05	Not required	0.05	0.05 for CSG 6-21F (Dried Shelled Peas), except lentils
Dry chickpea	Broadcast foliar/ 900 ¹	60 – 64	<0.05	0.04 ¹	Not required	0.05	
Dry pea	Broadcast foliar/ 602 – 612	53 – 61	<0.05	<0.05	Not required	0.05	
Dry soybean	Broadcast foliar/ 520 – 536	80 – 124	<0.05	<0.05	No concentration of residues expected	None	0.05 for dry soybeans

ppm = parts per million; PHI = preharvest interval; LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial

¹ Pyridate residue levels that were above the limit of quantitation of 0.05 ppm were scaled down based on the proportionality concept from a rate of 1.99 – 2.01 kg a.i./ha to a rate of 900 g a.i./ha.

Based on the dietary burden and residue data, an MRL of 0.6 ppm in meat byproducts of cattle, goats, horses and sheep to cover residues of pyridate and the metabolite pyridafol (free and conjugated), expressed in pyridate equivalents, is also proposed. This value will replace the currently established MRL of 0.2 ppm. No change is proposed to the MRL of 0.05 ppm, which is currently established for other animal-derived food commodities.

Following the review of all available data, the MRLs proposed in Table 1 are recommended to cover residues of pyridate and the metabolite pyridafol (free and conjugated), expressed as pyridate equivalents. Dietary risks from exposure to residues of pyridate in these crop and livestock commodities at the proposed MRLs were shown to be acceptable for the general population and all subpopulations, including infants, children, adults and seniors. Thus, the foods that contain residues as listed in Table 1 are considered safe to eat.

A toxicology assessment was not required for this application.

Environmental Assessment

The change to add in-crop application to dry peas, pre-emergent applications to soybeans, a new weed, and a tank mix for use on dry peas to the label of BCP258H Herbicide does not pose any additional risk to the environment when used according to the label.

Value Assessment

Value information submitted for review consisted of data from field trials, precedent products and scientific rationales. This information collectively demonstrated that the application of BCP258H Herbicide provided suppression of the labelled weeds and that dry peas and soybeans exhibited adequate margins of tolerance to the herbicide when it was applied as per the label instructions. Dry peas were also found to tolerate the tank mix of BCP258H Herbicide + metribuzin for the control or suppression of certain weeds.

These label expansions provide growers with a new herbicide option prior to seeding soybeans and in-crop use in dry peas for the control or suppression of labelled weeds. The tank mix with metribuzin will provide growers an effective weed control option with two modes of action at lower rates than either product used alone.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided and has found the information acceptable to support of the amendments to the product label for BCP258H Herbicide.

References

PMRA Document Number	References
3304042	2021, Food, Feed and Tobacco Residue Summary (Soybean and Dry Pea), DACO: 7.1,7.4.4,7.4.5
3304046	2021, Magnitude and Decline of Pyridate and Metabolite Residues on Dry Pea Following Application of Pyridate 600 EC, DACO: 7.4, 7.4.1, 7.4.2.
3304047	2021, Magnitude and Decline of Pyridate and Metabolite Residues on Soybean Following Application of Pyridate 600 EC, DACO: 7.4, 7.4.1, 7.4.2.
3330624	2022, Rationale to Waive the Requirement for a Soybean Processing Study for Tough 600 EC Herbicide, DACO 7.4.5.
3239129	2021, Summary of Value for Tough 600 EC Herbicide Addition of Tank Mix and Label Expansion, DACO: 10.2, 10.2.3, 10.2.3.1, 10.2.3.2, 10.2.3.2(B), 10.2.3.3(B), 10.2.3.4(B)
3239131	2021, Summary of Value for Tough 600 EC Herbicide Addition of Tank Mix and Label Expansion, DACO: 10.2, 10.2.3, 10.2.3.1, 10.2.3.2, 10.2.3.2(B), 10.2.3.3(B), 10.2.3.4(B)
3304048	2021, Summary of Value for Tough 600 EC Herbicide for In-Crop Applications in Dry Peas and Pre-Emergent to Soybeans, DACO: 10.1, 10.3, 10.3.1, 10.3.2, 10.3.2(A), 10.5, 10.5.1
3304050	2021, Summary of Value for Tough 600 EC Herbicide for In-Crop Applications in Dry Peas and Pre-Emergent to Soybeans, DACO: 10.1, 10.3, 10.3.1, 10.3.2, 10.3.2(A), 10.5, 10.5.1

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