

Evaluation Report for Category B, Subcategory 3.10, 3.12 Application

Application Number: 2019-6801
Application: Changes to Product Labels-Tank Mixes, New Site or Host
Product: Zidua SC
Registration Number: 32542
Active ingredient (a.i.): pyroxasulfone
PMRA Document Number : 3185989

Purpose of Application

The purpose of this application was to add a fall application for lentils to the label of Zidua SC, either alone for control of previously labelled weeds, or in tank-mix with glyphosate for control of additional weeds.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

A toxicology assessment was not required for this application.

Zidua SC, for late fall residual application prior to lentils being planted the following spring, fits within the registered use pattern for pyroxasulfone. The potential exposure for mixers, loaders, applicators, postapplication workers, and bystanders is not expected to exceed the current exposure to registered products.

No new residue data for pyroxasulfone were submitted to support the addition of a fall application to lentils on the label of Zidua SC. Previously reviewed residue chemistry data were reassessed in the framework of the current submission and it was confirmed that the use of Zidua SC on lentils is not expected to result in an increase in the magnitude of pyroxasulfone residues above the established MRL. Therefore, the fall application of Zidua SC on lentils will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The amendments to the registration of Zidua SC to add a late fall residual application for lentils for the suppression of annual grasses and annual broadleaf weeds and to add a late fall tank mix option for lentils is not expected to pose any additional environmental risks. As the application rates, methods, and timing are within those registered for the use on other crops, the environmental risk associated with this use has been adequately evaluated. The label is sufficient to mitigate any environmental concerns when Zidua SC is used in accordance

with label directions.

Value Assessment

A fall application of Zidua SC prior to planting lentils the following spring provides growers with a larger application window that can reduce the workload pressures the following spring. Furthermore, the winter snowfall and melt helps ensure the herbicide moves into the soil, which may help with improving the consistency of weed control.

Value information submitted for review consisted of efficacy and phytotoxicity data generated in field trials that were conducted in Saskatchewan and Alberta from 2018 to 2019. The provided trial data demonstrated that a fall application of Zidua SC at 90 or 120 g ai/ha would be expected to provide early-season suppression of labelled weeds the following spring, whilst not resulting in unacceptable lentil tolerance concerns.

Based on the weight of available evidence, amending the Zidua SC registration to include a fall application for lentil at a rate range of 180-240 mL/ha (i.e., 90-120 g ai/ha) alone for residual pre-emergence suppression of currently labelled weeds the following spring or in combination with glyphosate at 450-900 g ae/ha for the additional control of emerged weeds at the time of application is considered to have acceptable value.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found it sufficient to support a fall application for lentils to the label of Zidua SC, both alone and in tank-mix with glyphosate.

References

- 3063722 2019, Efficacy Trial Reports, DACO: 10.2.3.3(B)
- 3063723 2019, Phytotoxicity Trial Reports, DACO: 10.3.2(A)

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