

Evaluation Report for Category B, Subcategory 3.4 Application

Application Number: 2019-6159
Application: Changes to Product Labels – Application Method
Product: Manipulator 620
Registration Number: 31462
Active ingredient (a.i.): Chlormequat Chloride
PMRA Document Number: 3171205

Purpose of Application

The purpose of this application was to add aerial application to the Manipulator 620 product label.

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

The use of Manipulator 620 for aerial application to the listed crops does not fit within the registered use pattern for chlormequat chloride. A quantitative risk assessment for mixer, loader and applicator was conducted. No risks of concern are expected from the new method of application, provided that workers follow the label directions and wear the personal protective equipment identified on the label.

Toxicology and dietary exposure assessments were not required for this application.

Environmental Assessment

Manipulator 620 is a plant growth regulator currently registered for application using ground application equipment on spring, durum and winter wheat, spring and winter barley, and spring and winter oats between Zadoks Growth Stages (GS) 12 (the 2-leaf stage) to 39 (the flag leaf collar visible stage). No new environmental data were submitted and no additional environmental data are required. With the aerial application no additional environmental risk is expected; however, spray buffer zones are required.

Value Assessment

Manipulator 620 is registered for use on wheat (spring, durum and winter), barley (spring and winter) and oats (spring and winter), to produce plants with shorter, thicker stems for improved resistance to lodging. Lodging in cereal crops reduces quality and complicates harvesting. The data from small scale field trials conducted in spring wheat were submitted for review. Applications were made by ground boom at lower water volumes to simulate aerial application (30 L/ha, 50 L/ha) and compared to the registered water volume of 100 L/ha. The data demonstrate that efficacy is not impacted when Manipulator 620 is applied in lower application volumes.

Wheat, barley and oats are grown on substantial acreage in Canada, over 13 million hectares according to the applicant. The expansion of the Manipulator 620 label to include aerial application to wheat, barley and oats gives growers more flexibility to choose an application method based on the size of the area being treated.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided and has found it sufficient to support the addition of aerial application on the Manipulator 620 product label.

References

PMRA Document Number 3050236	References 2018, Value Summary for the Growth Regulator Manipulator 620 in Aerial Application, DACO: 10.1, 10.2.1, 10.2.2, 10.2.3.1, 10.2.3.2(B), 10.2.3.3(B), 10.3.1, 10.3.3, 10.4, 10.5.1, 10.5.2, 10.5.3, 10.5.4
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