

Evaluation Report for Category B, Subcategory 3.12 Application

Application Number: 2012-4102
Application: New to Product Labels - New Site or Host
Product: TXP Plant Growth Regulator
Registration Number: 31214
Active ingredients (a.i.): Trinexapac-ethyl
PMRA Document Number: 2362933

Purpose of Application

The purpose of this application was to register a new end use product containing trinexapac-ethyl to be used on perennial ryegrass grown for seed. This end-use product was based on currently registered product, Primo MAXX (Registration No. 26989).

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

TXP Plant Growth Regulator was of low acute toxicity by the oral and inhalation routes in rats and by the dermal route in rabbits. It was moderately irritating to rabbit eyes and minimally irritating to rabbit skin. It was not a dermal sensitizer in guinea pigs.

TXP Plant Growth Regulator for use on perennial ryegrass as a plant growth regulator does not fit within the registered use pattern for trinexapac-ethyl as the application rate is slightly higher than currently registered rate on turf. However, this slight increase in application rate is not expected to result in risks of concern provided all label statements and precautions are followed.

Environmental Assessment

The environmental exposure of the expansion to rye grass for seed is very similar to the registered uses of Primo MAXX and, thus, is not of concern.

Value Assessment

Perennial ryegrass is an important seed crop in western Canada. Seed yield of perennial ryegrass is related in part to moisture and fertility level. Growers have adopted a management program that includes higher rates of nitrogen. However, the difficulty with increased nitrogen rates is that it also promotes vegetative growth, which in turn causes early lodging of the crop. There is no product currently available for growth management of perennial ryegrass grown for seed in Canada.

Trinexapac-ethyl containing end use products, e.g., Primo MAXX, are registered for managing growth of turfgrass, including perennial ryegrass, on commercial sod farm and golf courses in Canada. Palisade EC (EPA Reg. No. 100-949; containing 12% trinexapac-ethyl) has been registered in the US for growth management, specifically for lodging prevention and yield protection, of grasses grown for seeds, wheat, triticale, barley, oats, and sugarcane since 1999.

Information from three field research trials conducted in Manitoba in 2012 was also submitted for review. Data from these trials confirmed that one application of TXP Plant Growth Regulator at 1.7 or 3.4 L/ha reduced plant lodging and increased seed yield of perennial ryegrass when applied in accordance with label directions.

The registration of TXP Plant Growth Regulator may provide growers an effective tool for managing growth of perennial ryegrass for seeds.

Conclusion

The Pest Management Regulatory Agency (PMRA) has completed an evaluation of the subject application and has found the information sufficient to register a new end use product containing trinexapac-ethyl to be used on perennial ryegrass grown for seed.

References

- 2273568 Effects of Trinexapac-Ethyl on Perennial Ryegrass in Manitoba. DACO: 10.2.3.1.
- 2229484 Letter of support from Manitoba Forage Seed Association, August 22, 2012.
DACO: 0.8.3
- 1050696 1998, Primo Maxx: Acute Oral Toxicity In Rats. Final Report. DACO: 4.6.1
- 1050697 1998, Primo Maxx: Acute Dermal Toxicity In Rabbits. Final Report. DACO:
4.6.2
- 1050698 1998, Primo Maxx: Acute Inhalation Toxicity In Rabbits. Final Report. DACO:
4.6.3
- 1050699 1998, Primo Maxx: Primary Eye Irritation Study In Rabbits. Final Report. DACO:
4.6.4
- 1050700 1998, Primo Maxx: Primary Dermal Irritation Study In Rabbits. Final Report.
DACO: 4.6.5
- 1050701 1998, Primo Maxx: Dermal Sensitization Study In Guinea Pigs. Final Report.
DACO: 4.6.6

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