



Evaluation Report for Category C, Subcategory C.3.10,C.3.11 Application

Application Number: 2008-0258
Application: Category C, subcategory C.3.10, c.3.11 (new pest and tank mix addition to the product label)
Product: Premis 200 F Fungicide
Registration Number: 28387
Active ingredients (a.i.): Triticonazole
PMRA Document Number : 1600480

Background

Premis 200 F Fungicide (Reg. No. 28387) was first registered on June 15, 2006 and is currently registered for control of anthracnose, brown patch and dollar spot on established golf course turf only. Premis 200 F Fungicide is a group 3 demethylation inhibitor (DMI) containing triticonazole (200 g/L), a member of the chemical group triazole. Triticonazole is a contact and systemic fungicide, effective as a preventative spray.

Rovral Green GT (Reg. No. 24379) was first registered on March 27, 1996. This is a group 2 fungicide containing 240 g/L iprodione currently registered for control of brown patch, Fusarium patch, dollar spot, leaf spot, pink and gray snow molds, and melting out in turf. The current registered rate for the control of gray snow mold is 375 ml/100 m².

Purpose of Application

The purpose of this submission is to add a new pest, gray snow mold (*Typhula incarnata*, *T. ishikariensis*), and a new tank mix partner, Rovral Green, to the existing Premis 200 F Fungicide label.

Chemistry, Health, and Environmental Assessment

A chemistry assessment was not required since there was no change to the product chemistry. Health and environmental assessments were not required since the use pattern, application rates and timing of the component products remained unchanged.

Value Assessment

Five trials conducted in Canada from 2000 to 2007 on gray snow mold were submitted for review. Two of the trials were considered supplementary as gray and pink snow mold were assessed together. In these trials, the disease pressure was moderate to high. Disease severity was significantly lower in the Premis 200 F treated plots than the untreated control in all trials

although the level of control was not uniform across trials. The level of control with Premis 200 F Fungicide, when applied once at 32 ml/100m², varied from 57-94%. To insure a good level of control under conditions that favor heavy disease pressure or if there is prior history of the disease, Premis 200 F should be applied twice before snow fall with a 21 day interval between applications.

The purpose of the tank mix is to increase the level of efficacy and consistency of Premis 200 F as well as reducing the risk of fungicide resistance. The proposed tank mix of Premis 200 F Fungicide (32ml/100 m²) and Rovral Green (250ml/100 m²) did not provide a consistent level of control. Increased efficacy of the tank mix over Premis 200 F applied alone was observed in one trial. In the other trials, control provided by the Premis 200 F/Rovral Green tank mix was comparable to the commercial standard tank mix (Daconil 2787/Rovral Green). No significant synergistic fungicidal effect was observed when mixing Premis 200 F and Rovral Green. The rate of Rovral Green tank mixed with Premis 200 F has been amended by the applicant to 375 ml/100m², which is the registered rate for using Rovral Green alone for control of gray snow mold. In all trials reviewed, the rate of Rovral Green used was 250 ml/100 m². It is reasonable to assume that increasing the rate of Rovral Green from 250 to 375 ml/100m² in the tank mix would provide a higher level of control than observed in the trials. In addition, tank mixes of fungicides with different modes of action are recommended to delay resistance development. Therefore, a tank mix of Premis 200 F (group 3 fungicide) and Rovral Green (group 2 fungicide) would mitigate the risk of triticonazole (Premis 200 F) resistance development.

Conclusion

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Premis 200 F Fungicide to include a new pest, gray snow mold (*Typhula incarnata*, *T. ishikariensis*), and a new tank mix partner, Rovral Green, to the existing Premis 200 F Fungicide label for use on golf course turf.

References

PMRA #1539783. 2008. Petition for the addition of Fusarium patch, Pink (*Microdochium nivale*) and Gray Snow Mold (*Typhula incarnata*, *T. ishikariensis*) on established golf course turf., N.A, MRID: N.A, DACO: 10.1,10.2,10.2.1,10.2.2,10.2.3,10.2.3.1,10.2.3.3(D),10.3,10.3.1

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