

Evaluation Report for Category C, Subcategory 3.11 Application

Application Number: 2012-0491
Application: New or Changes to Product Labels - New Pests
Product: Proline 480 SC Fungicide
Registration Number: 28359
Active ingredients (a.i.): Prothioconazole
PMRA Document Number: 2195852

Background

Proline 480 SC Foliar Fungicide was first registered in Canada on November 15, 2006. This product is currently registered for suppression of ear rots caused by *Fusarium* spp. and *Gibberella* spp. as well as for control of rusts, eyespot, grey leaf spot and northern leaf blight on corn (field, sweet, popcorn, seed production), among other uses.

Proline 480 SC Foliar Fungicide contains 480 g/L prothioconazole and belongs to the triazole chemical group. This active ingredient acts as a sterol biosynthesis inhibitor, which results in a disruption of the fungal membrane function. For specific details of uses, application rates and methods, precautions, restrictions, and personal protective equipment requirements, refer to the product label.

Purpose of Application

The purpose of this Cat C.3.11 submission is to expand the label of Proline 480 SC Foliar Fungicide for suppression of the corn stalk rot pathogens *Fusarium* spp., *Giberella* spp. and *Colletotrichum* spp., which cause stalk lodging.

Chemistry, Health, and Environmental Assessments

A chemistry assessment was not required since there was no change to product chemistry. Health and environmental assessments were not required since application rates for the new use are equal or lower to the previously registered rates.

Value Assessment

Three small-plot field trials were conducted in 2011 in Ontario to assess the efficacy of Proline 480 SC Foliar Fungicide on the stalk rot disease complex in corn. One application of Proline 480 SC Foliar Fungicide at 420 mL/ha suppressed stalk rot caused by *Colletotrichum* sp. and *Fusarium* sp. and reduced corn stalk lodging by 80-90%. *Gibberella* spp. was not found in the collected corn stalk samples, but may be added to the list of supported stalk rot pathogens given that Proline 480 SC Foliar Fungicide is already registered for suppression of gibberella ear rots (*Gibberella* spp.) on corn. The efficacy data adequately showed the relationship between stalk rot infection and percentage lodging.

Conclusion

The PMRA has completed an evaluation of the subject application and has found the information sufficient to amend the registration of Proline 480 SC Foliar Fungicide for suppression of the corn stalk rot pathogens *Fusarium* spp., *Giberella* spp. and *Colletotrichum* spp.

References

- 2175530 2012, Proline 480 SC Foliar Fungicide - Data to Support Suppression of Stalk Rot in Corn, DACO: 10.1, 10.2.2, 10.2.3.1, 10.2.3.3(D)
- 2175531 2012, Proline 480 SC Foliar Fungicide - Data to Support Suppression of Stalk Rot in Corn, DACO: 10.2.3.1, 10.2.3.3(D)
- 2182573 Albert Tenuta, David Hooker, 2009, CropPest Ontario: Lodging (Stalk Rot) and Corn Fungicides, DACO: 10.5

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