

Evaluation Report for Category B, Subcategory 3.12, 3.5 Application

Application Number: 2014-1631
Application: New or changes to product labels – new site or host, rotational crops/plant back interval
Product: Prosaro 421 SC Foliar Fungicide
Registration Number: 29819
Active ingredients (a.i.): Prothioconazole, Tebuconazole
PMRA Document Number: 2524686

Purpose of Application

The purpose of this application was to add control of various fungal diseases on oats and amend the rotational cropping statement to allow immediate plant back of soybeans and oats.

Chemistry Assessment

A chemistry assessment was not required.

Health Assessments

A toxicology assessment was not required.

No occupational exposure risks of concern were identified for the new end-use product, Prosaro 421 SC Foliar Fungicide, containing the active ingredients tebuconazole and prothioconazole. No risks of concern are expected when workers follow the label directions and wear the personal protective equipment identified on the label.

Previously reviewed residue data from field trials conducted in/on wheat, barley, oats, and soybeans were reassessed in the framework of this petition. Data on file support the use of tebuconazole and prothioconazole on oats. In addition, the amendment to the rotational crop statement on the Prosaro 421 SC Foliar Fungicide label to allow treated areas to be replanted with soybeans as soon as practical after the last application was supported.

The use of Prosaro 421SC Foliar Fungicide will not result in residues of tebuconazole or prothioconazole exceeding the established MRLs in these commodities. Therefore, dietary exposure to these active ingredients is not expected to increase, and no unacceptable risk is anticipated to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

The use of Prosaro 421 SC Foliar Fungicide on oats represents the same application methods, rate, and crop group as are already registered for use on wheat and barley. Therefore, environmental exposure to tebuconazole and prothioconazole is not expected to increase, and no unacceptable risk is anticipated when Prosaro 421 SC Foliar Fungicide is used in accordance with instructions on the labels.

Value Assessment

Four efficacy trials on oats conducted in 2009 were submitted to support the claim of control of crown rust. Overall, Prosaro 250 EC Fungicide (a product also containing tebuconazole and prothioconazole) controlled the disease when applied in accordance with the directions for use. Prosaro 250 EC Fungicide significantly reduced crown rust incidence on the flag and penultimate leaves by 83% at 19 days after treatment (DAT), and significantly reduced disease severity on the flag and penultimate leaves by 96% at 34 DAT under high disease pressure, as compared to the non-treated control. Prosaro 421 SC Foliar Fungicide significantly reduced crown rust severity at the flag leaf stage by an average of 97% (n = 4; 93 – 100%) at 49 DAT, compared to the non-treated control under high disease pressure (disease severity at 63 – 93%; n = 4). In one trial with only disease incidence reported, Prosaro 421 SC Foliar Fungicide significantly reduced disease incidence by 89% at 49 DAT under high disease pressure with 78% disease incidence in the non-treated control. The performance of Prosaro 421 SC Foliar Fungicide was comparable or superior to that achieved by other registered fungicides applied as commercial standards in the same trials.

Scientific rationales were provided by the applicant to support the control claims for stem rust and stagonospora (septoria) leaf blotch and black stem in Canada. A use claim against stem rust on wheat is currently registered for both Prosaro 250 EC Fungicide and Prosaro 421 SC Foliar Fungicide, and the disease is caused by the same species of *Puccinia*, with different special forms (*forma specialis*) on wheat (*P. graminis* f. sp. *tritici*) and oats (*P. graminis* f. sp. *avenae*). Stagonospora (septoria) leaf and glume blotch on wheat and septoria leaf blotch on barley are currently listed on the Prosaro labels. Similar to stem rust described above, a different special form of *Stagonospora avenae* (i.e., *S. avenae* f. sp. *triticea*) from the pathogen on oats (*S. avenae* f. sp. *avenaria*) is also the causal pathogen of stagonospora (septoria) disease on wheat and barley. Since Prosaro 421 SC Foliar Fungicide controls stem rust and septoria diseases on either wheat or barley as indicated by the registrant, similar performance is expected against stem rust and stagonospora (septoria) diseases on oats.

The availability of Prosaro 421 SC Foliar Fungicide for use on oats provides Canadian growers an additional option to control crown rust, stem rust, and stagonospora (septoria) leaf blotch and black stem.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the amendment to Prosaro 421 SC Foliar Fungicide.

References

- 2424615 2014, Prosaro 250 EC and Prosaro 421 SC Fungicides for Disease Control on Tame Oats, DACO: 10, 10.1, 10.2, 10.2.3, 10.2.3.1, 10.2.3.3(D), 10.3, 10.3.1, 10.3.2
- 2424616 2014, ASSESSMENT of Prosaro 250 EC and Prosaro 421 SC Fungicides for disease control on tame oats, DACO: 10.1

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