

New Tank Mix, New Pests

Evaluation Report for Category B, Subcategory 3.10, 3.11 Application

Application Number: 2021-1563
Application: New Tank Mix, New Pests
Product: A19649 Fungicide
Registration Number: 33018
Active ingredients (a.i.): Pydiflumetofen
PMRA Document Number: 3272558

Background

A19649 Fungicide was first registered on May 24, 2018. It is registered for foliar application to multiple crops for control or suppression of certain diseases, including on wheat (spring, winter, durum) to suppress fusarium head blight and control septoria leaf blotch and tan spot. A19649 Fungicide is applied at 0.75-1.0 L product/ha once per year with ground or aerial application equipment. 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 application was to expand the registration of A19649 Fungicide to include the option of applying this product at 0.5-0.625 L product/ha (100-125 g a.i./ha) in a tank mixture with Miravis Era B (contains 250 g prothioconazole/L) at 0.4-0.5 L product/ha (100-125 g a.i./ha) and a 0.125% v/v non-ionic surfactant to wheat (spring, winter, durum) to suppress fusarium head blight and to control certain leaf diseases. Both products are being applied at a rate lower than what is registered when applied solo with a surfactant (A19649 Fungicide) or without (Miravis Era B).

Chemistry Assessment

A chemistry assessment was not required as there was no change to the product formulation.

Health and Environmental Assessment

Health and environmental assessments were not required as there was no change to host crops, application methods and timings and since there was no increase in application rate.

Value Assessment

Fusarium head blight is a serious disease of wheat and is known to produce the mycotoxin, deoxynivalenol (DON) that contaminates cereal crops and leads to a disruption of protein synthesis and other important cellular functions in humans, livestock and companion animals. Wheat leaf diseases can result in serious grain yield and quality loss, particularly for the upper leaves that are critical for grain filling.

Value information was submitted in the form of efficacy data generated in eight field trials in which tank mixtures of A19649 plus a prothioconazole fungicide at 100+100 g a.i./ha or 125+125 g a.i./ha plus 0.125% non-ionic surfactant was applied to spring wheat or durum wheat. The data provided evidence that the tank mix applied preventatively at these rates can be expected to control leaf rust and suppress fusarium head blight, as evidenced by evaluations of the disease itself, fusarium-damaged kernels and DON. The data support the use of the highest rate when conditions favour the development of higher disease pressure.

The tank mix of A19649 Fungicide plus Miravis Era B plus a non-ionic surfactant presents wheat growers with a new option to manage fusarium head blight, the deoxynivalenol mycotoxin, and leaf rust while mitigating the risk of resistance development when used as a component of an integrated disease management program.

Conclusion

The PMRA has conducted an assessment of the subject application and has determined that the submitted information is adequate to support claims of suppression of fusarium head blight and control of leaf rust on wheat (spring, winter, durum) for the tank mix of 0.5-0.625 L/ha A19649 Fungicide plus 0.4-0.5 L Miravis Era B plus 0.125% v/v non-ionic surfactant applied to wheat (spring, winter, durum) once per year.

References

List of Studies/Information Submitted by Registrant

Value Assessment

- | | |
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| 3220047 | 2021, DACO 10.1 VALUE SUMMARY: Efficacy and Crop Response for Control of Wheat Leaf Rust, Septoria Leaf Blotch and Tan Spot and Suppression of Fusarium Head Blight in Spring, Winter and Durum Wheat, with a Tank-mix of A19649 Fungicide and ADAMA Prothioconazole 250EC Foliar Fungicides, DACO: 10.1 |
| 3220049 | 2020, Evaluate Adepidyn + Prothioconazole component and tank mix ratio's for suppression of Fusarium head blight with Fusarium graminearum in wheat., DACO: 10.2.3.3 |
| 3220050 | 2020, Evaluate Adepidyn + Prothioconazole component and tank mix ratio's for suppression of Fusarium head blight with Fusarium graminearum in wheat., DACO: 10.2.3.3 |
| 3220051 | 2020, Evaluate Adepidyn + Prothioconazole component and tank mix ratio's for suppression of Fusarium head blight with Fusarium graminearum in wheat., DACO: 10.2.3.3 |
| 3220052 | 2020, Evaluate Adepidyn + Prothioconazole component and tank mix ratio's for suppression of Fusarium head blight with Fusarium graminearum in wheat., DACO: 10.2.3.3 |
| 3220053 | 2020, Evaluate Adepidyn + Prothioconazole component and tank mix ratio's for suppression of Fusarium head blight with Fusarium graminearum in wheat., DACO: 10.2.3.3 |
| 3220054 | 2020, Evaluate the performance of lower than registered rates of Prothioconazole alone and in combination with Adepidyn for control of wheat leaf rust in wheat., DACO: 10.2.3.3 |
| 3220055 | 2020, Evaluate the performance of lower than registered rates of Prothioconazole alone and in combination with Adepidyn for control of wheat leaf rust in wheat., DACO: 10.2.3.3 |
| 3220056 | 2020, Evaluate the performance of lower than registered rates of Prothioconazole alone and in combination with Adepidyn for control of wheat leaf rust in wheat., DACO: 10.2.3.3 |

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