

Evaluation Report for Category B, Subcategory 3.10, 3.11 Application

Application Number: 2022-1827
Application: New Tank Mix, New Pests
Product: A19649 Fungicide
Registration Number: 33018
Active ingredients (a.i.): Pydiflumetofen
PMRA Document Number :3396749

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 fusarium head blight, septoria leaf blotch and tan spot on wheat (spring, winter, and durum). 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 ai/ha) in a tank mixture with Miravis Era B (250 g prothioconazole/L) at 0.4-0.5 L product/ha (100-125 g ai/ha) and in combination with 0.125% v/v non-ionic surfactant. The proposed claims are for the suppression of fusarium head blight caused by *Fusarium* species and control of septoria leaf blotch (*Septoria tritici*) and tan spot (*Pyrenophora tritici-repentis*) in wheat (spring, winter, and durum), and for suppression of fusarium head blight (*Fusarium graminearum*) in barley.

Chemistry Assessment

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

Health and Environmental Assessments

Health and environmental assessments were not required as there was no change to host crops, application methods, rates or timing.

Value Assessment

The tank mixture of A19649 and Miravis Era B in combination with a non-ionic surfactant was supported by value information in the form of efficacy data from a previously reviewed submission and six additional efficacy trials conducted on wheat in 2021. Rationales to justify extrapolation of the fusarium head blight claim from wheat to barley for the tank mixture was also submitted. The value information provided evidence that the tank mix

applied preventatively at these rates can be expected to control septoria leaf blotch and tan spot, and suppress fusarium head blight caused by *Fusarium* spp. in wheat, as evidenced by reductions in disease severity, fusarium-damaged kernels and the mycotoxin deoxynivalenol. The rationale also supported the claim for suppression of fusarium head blight (*Fusarium graminearum*) in barley.

The tank mix of A19649 Fungicide plus Miravis Era B plus a non-ionic surfactant provides wheat and barley growers with a new option to manage fusarium head blight and leaf diseases 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 caused by *Fusarium* spp. and to control septoria leaf blotch (*Septoria tritici*) and tan spot (*Pyrenophora tritici-repentis*) in wheat (spring, winter, durum) and for suppression of fusarium head blight (*Fusarium graminearum*) in barley for a tank mix of 0.5-0.625 L/ha A19649 Fungicide with 0.4-0.5 L Miravis Era B and a non-ionic surfactant at 0.125% v/v applied once per year.

References

2569827	2015, A19649 - Adepidyn (SYN545974), 200 g/L - Document M-III, Section 7 - Efficacy and Information - Canada, DACO: 10.1
2571325	2015, A21461 - Adepidyn (SYN545974), Azoxystrobin and Propiconazole, 300 g/L - Document M-III, Section 7 - Efficacy Data and Information - Canada, DACO: 10.1
2571420	2013, WHE13-03 - Evaluate FUSHA LER for the control of cereal leaf diseases in spring and winter wheat, DACO: 10.2.3.3
2571421	2013, WHE13-05 - Evaluate FUSHA LER for the control of cereal leaf diseases in spring and winter wheat, DACO: 10.2.3.3
2571425	2013, WHE13-02 - Evaluate FUSHA LER for the control of cereal leaf diseases in spring and winter wheat, DACO: 10.2.3.3
2571428	2013, WHE13-04 - Evaluate FUSHA LER for the control of cereal leaf diseases in spring and winter wheat, DACO: 10.2.3.3
2571444	2014, WHE14-07 - Evaluate FUSHA LER for the control of leaf diseases in cereals, DACO: 10.2.3.3
2571445	2014, WHE14-04 - Evaluate FUSHA LER for the control of leaf diseases in cereals, DACO: 10.2.3.3
2571446	2014, WHE14-06 - Evaluate FUSHA LER for the control of leaf diseases in cereals, DACO: 10.2.3.3
2571451	2014, WHE14-05 - Evaluate FUSHA LER for the control of leaf diseases in cereals, DACO: 10.2.3.3

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
3220048	2021, Efficacy Data Summary for A19649 Fungicide and ADAMA Prothioconazole 250EC Fungicide in Wheat for suppression and control of various pests, DACO: 10.1
3220049	2020, Evaluate Adepidyn + Prothioconazole component and tank mix ratio's for suppression of Fusarium head blight with <i>Fusarium graminearum</i> 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 <i>Fusarium graminearum</i> 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 <i>Fusarium graminearum</i> 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 <i>Fusarium graminearum</i> 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 <i>Fusarium graminearum</i> in wheat., DACO: 10.2.3.3
3350050	2022, New or Change in Uses A19649 Fungicide 33018 2022-05-09, DACO: 0.1.6023
3350056	2017, PMRA Value Assessment of A19649TO Fungicide, Containing Pydiflumetofen, Azoxystrobin, and Propiconazole, Proposed Use Site Categories (USC 13), (USC 14), Submission Number 2015-5373, PMRA 2694129, DACO: 10.1
3350057	2022, DACO 10 VALUE SUMMARY: Efficacy and Crop Response for suppression of Fusarium head blight in wheat and barley and control of associated leaf diseases Septoria leaf blotch and tan spot in wheat with a mixture of A19649 Fungicide and Miravis Era B., DACO: 10.1
3350058	2022, Efficacy Data Summary for Miravis Era A Fungicide and Miravis Era B Fungicide, DACO: 10.2.3.1
3350059	2021, Evaluate Adepidyn and Prothioconazole tank mix and premix rates for suppression of Fusarium head blight with <i>Fusarium</i> species in wheat., DACO: 10.2.3.3
3350060	2021, Evaluate Adepidyn and Prothioconazole tank mix and premix rates for suppression of Fusarium head blight with <i>Fusarium</i> species in wheat., DACO: 10.2.3.3
3350061	2021, Evaluate Adepidyn and Prothioconazole tank mix and premix rates for suppression of Fusarium head blight with <i>Fusarium</i> species in wheat., DACO: 10.2.3.3

3350062	2021, Evaluate Adepidyn and Prothioconazole tank mix and premix rates for suppression of Fusarium head blight with Fusarium species in wheat., DACO: 10.2.3.3
3350063	2021, Evaluate Adepidyn and Prothioconazole tank mix and premix rates for suppression of Fusarium head blight with Fusarium species in wheat., DACO: 10.2.3.3
3350064	2021, Evaluate Adepidyn and Prothioconazole tank mix and premix rates for suppression of Fusarium head blight with Fusarium species in wheat., DACO: 10.2.3.3

© His Majesty the King in Right of Canada, as represented by the Minister of Health Canada, 2022

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of Health Canada, Ottawa, Ontario K1A 0K9.