

Evaluation Report for Category B, Subcategory 3.11, 3.12, 3.4 & 3.5 Application

Application Number: 2012-3814
Application: New or Changes to Product Labels-New Pests; New Site or Host;
Application Method; Rotational Crops\Plantback Interval
Product: Luna Tranquility
Registration Number: 30510
Active ingredients (a.i.): fluopyram and pyrimethanil
PMRA Document Number: 2261899

Background

Luna Tranquility is a fungicide that contains the active ingredients fluopyram and pyrimethanil. It has a Conditional Registration since June 2012 for use on apples and wine grapes.

Purpose of Application

The purpose of this application was to expand the label of Luna Tranquility to potatoes for control of early blight (*Alternaria solani*), brown leaf spot (*Alternaria alternata*) and white mould (*Sclerotinia sclerotiorum*); and suppression of black dot (*Colletotrichum coccodes*). Ground and air applications were also proposed on this new crop.

Chemistry Assessment

A chemistry review was not required for this application.

Health Assessments

No new residue data for pyrimethanil or fluopyram were submitted to support the addition of potatoes with ground and aerial applications. Pyrimethanil and fluopyram are currently registered for use on potatoes with a similar use pattern and restrictions. The rotational crop restrictions are adequate to cover the requirements for both active ingredients. No increase in dietary exposure to pyrimethanil and fluopyram is expected. The resulting residues in/on potatoes is covered under the established MRL of 0.05 ppm for pyrimethanil, and under the MRL of 0.02 ppm for fluopyram, and would not pose an unacceptable health risk to any segment of the population, including infants, children, adults and seniors.

As Luna Tranquility for use on potatoes fits within the registered use pattern for fluopyram and pyrimethanil, the potential exposure for mixers, loaders, applicators and postapplication re-entry workers is not expected to exceed the current exposure to registered products, provided all label statements and precautions are followed.

Environmental Assessment

Luna Tranquility is presently registered for use on wine grapes and apples. Both fluopyram and pyrimethanil are currently independently registered for use on potatoes as Luna Privilege (Reg. No. 30509) and Scala SC Fungicide (Reg. No. 28011), respectively.

The application rates of Luna Tranquility for potato are equal to or less than those registered for individual fluopyram and pyrimethanil products for the same crop and also the methods of application (air and ground applications) are the same. A label expansion of Luna Tranquility to include potato is, therefore, not expected to pose additional environmental concerns.

Value Assessment

A total of 12 potato trials from Canada and the U.S. tested the efficacy of Luna Tranquility against early blight (7 studies), brown leaf spot (1 study), white mould (3 studies) and black dot (3 studies). Early blight trials were considered as supplementary data in support of the brown leaf spot claim based on similarities in pest biology between their causal agents. Product efficacy under moderate to high disease pressure was consistent with the proposed levels of protection. A simulation of aerial application was performed in two early blight trials and similar disease control was achieved with Luna Tranquility regardless of the tested water volume. Based on the above considerations, the four proposed claims are supported as proposed.

Luna Tranquility shows an increased spectrum of fungicidal activity compared to current commercial standards due to its dual mode of action and will contribute to delay resistance development in *Alternaria solani* populations. It represents a valuable tool for potato growers considering that resistance to strobilurin fungicides has been reported in various locations.

Conclusion

The PMRA has conducted a review of the available information in support of this application and has determined that the amendment to the label is acceptable.

References

- 2224017 2012, Luna Tranquility (Reg. No. 30510), DACO 0.17.1, General Data Bridging Rationale, DACO: 0.17.1
- 2224022 2012, Luna Tranquility 500 SC for Control of Early Blight, White Mold, Brown Leaf Spot and Block Dot in Potatoes, DACO: 10.1,10.2.2,10.2.3.1,10.2.3.3(D),10.3,10.3.1,10.3.2(B)
- 2224023 2012, Luna Tranquility 500 SC for Control of Early Blight, White Mold, Brown Leaf Spot and Block Dot in Potatoes, DACO: 10.2.3.1

ISSN: 1911-8082

8 Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2015

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 the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.