

# **Evaluation Report for Category B, Subcategories 3.1, 3.11, 3.12 Application**

**Application Number:** 2017-6724

**Application:** New Product Labels-Application Rate Increase or Decrease

New Product Labels-New Pests

New Product Labels-New Site or Host

**Product:** Lumivia CPL Seed Treatment

**Registration Number:** 33335

**Active ingredient (a.i.):** Chlorantraniliprole

PMRA Document Number: 2955044

## **Purpose of Application**

The purpose of this application was to register a seed treatment product containing chlorantraniliprole, Lumivia CPL Seed Treatment, for use on cereals and dry legume vegetables for early season protection from feeding damage by cutworms, armyworms and pea leaf weevil larvae. Lumivia CPL Seed Treatment is based on a registered precedent product.

## **Chemistry Assessment**

A chemistry assessment was not required for this application.

#### **Health Assessments**

A toxicology assessment was not required for this application.

A human health evaluation was completed for Lumivia CPL Seed Treatment. Chlorantraniliprole is of low systemic toxicity via the dermal and inhalation routes when workers are exposed for a short- to intermediate-term duration, which is expected based on the seeds treated. As a result, risks to workers in commercial facilities, to those completing mobile and on-farm treatment, and to those planting or handling treated seed are not expected to be of concern when label directions and precautionary statements are followed.

No residue data for chlorantraniliprole in cereals and dry legumes were submitted to support the use expansion of this active ingredient on the Lumivia CPL Seed Treatment label. Previously reviewed residue data from field trials conducted in/on cereals and legumes were reassessed in the framework of this petition. In addition, a processing study in treated wheat was also reassessed to determine the potential for concentration of residues of chlorantraniliprole into processed commodities.

Expected residues of chlorantraniliprole will remain covered by the current MRLs.



This use expansion will not pose health risks of concern to any segment of the population, including infants, children, adults and seniors.

## **Environmental Assessment**

The product is based on a registered product and the seed treatment rates for cereals and legumes are lower than those previously registered for corn seeds on a per kilogram basis. Therefore, the previously conducted environmental risk assessment is sufficient to cover the current use expansion. The existing mitigation measures on the label are adequate to address any environmental concerns.

#### Value Assessment

Efficacy data from 15 trials, including field, field cage, greenhouse, and laboratory trials, provided support for claims of early season protection from black cutworm, armyworm, and wireworm damage to spring wheat and from pea leaf weevil larval damage to field peas, armyworm damage to lentils, and black cutworm damage to field peas and lentils. These claims can be extrapolated to barley, oats, and rye and to other legume crops, and the registered use pattern of the precedent product provides further support for more general claims for cutworms as well as armyworm and wireworms. Lumivia CPL Seed Treatment provides a new pest management strategy (seed treatment) for cutworms and armyworm in cereals and dry legumes and a new mode of action for seed treatments of cereals for wireworms and dry legumes for pea leaf weevil.

#### Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found it sufficient to support the registration of Lumivia CPL Seed Treatment.

# References

PMRA Document Number	Reference
2818835	2017, Submission for addition of Cereals and Pulse Crops to Lumivia <sup>TM</sup> CPL Seed Treatment - Canada, 2017, DACO: 10.1, 10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, 10.2.3.3(D), 10.2.4, 10.3.1, 10.3.2, 10.4, 10.5.1, 10.5.2, 10.5.3

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