

Grower Survey on NEONICOTINOID Use in Greenhouse Vegetables

Introduction

Imidacloprid (e.g. Intercept 60WP) is registered for insect control in certain greenhouse vegetable crops.

Health Canada's Pest Management Regulatory Agency (PMRA) published the Proposed Re-evaluation Decision for imidacloprid, PRVD2016-20 on November 23, 2016.

The environmental assessment showed that, in aquatic environments in Canada, imidacloprid is being measured at levels that are harmful to aquatic insects (aquatic invertebrates).

The health assessment did not identify human health concerns from any exposure route when used according to current label standards.

FOR THE PROTECTION OF THE ENVIRONMENT, PMRA IS PROPOSING TO PHASE-OUT ALL AGRICULTURAL USES OF IMIDACLOPRID OVER THREE TO FIVE YEARS. PMRA will consider alternate risk management proposals, provided that they can achieve acceptable levels in the environment in the same timeframe with a deadline for response of February 21, 2017.

In addition, the PMRA has announced the initiation of Specials Reviews (REV2016-17) of two additional neonicotinoid insecticides due to potential risk to aquatic invertebrates:

- clothianidin may be used in combination with imidacloprid on commercially treated vegetable seed.
- thiamethoxam (trade name Flagship) used as a foliar spray to control Pepper Weevil on greenhouse peppers.

For the CHC to respond effectively to the PMRA consultation on imidacloprid and gather information on the other neonicotinoid thiamethoxam, grower input on how these products are actually used is essential, and your feedback in the attached grower survey is critical.

This survey will take at least 10-15 minutes to complete.



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General Operation Questions

*** 1. This survey is being completed by:**

Respondent Type (Grower/Association/PMUC/Other) (required):

Province (required):

2. What type of greenhouse do you operate?

Propagation

Production

Other (please specify)

3. What is the area of your greenhouse?

Less than 1 ha

1 to 5 ha

Greater than 5 ha

Other (please specify)

4. What crops are grown in your greenhouse? Check all that apply.

- Tomato
- Pepper
- Cucumber
- Lettuce
- Eggplant
- Other (please specify)

5. What is the number of cropping cycles per year?

- One
- Two
- Three
- Four
- Other (please specify)



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IMIDACLOPRID QUESTIONS

(Trade Name: Intercept 60WP)

6. How frequently do you use imidacloprid?

- Never
- Annually
- Every second year
- Sporadically

Other (please specify)

7. When is imidacloprid used during the production cycle of your crop?

- At the propagation house
- During fall clean-up
- As an emergency back up at any point in the cycle when BCAs and other pesticides fail
- Other (describe)

8. What area of the greenhouse is imidacloprid typically applied to?

- Entire greenhouse
- A section or bay of the greenhouse
- Spot treatments
- Other (specify)

*** 9. How important is imidacloprid to your Integrated Pest Management (IPM) program?**

- 1 = Not important
- 2 = Slightly important
- 3 = Important
- 4 = Moderately important
- 5 = Extremely important

Comments:



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Water Recirculation System Questions

10. Does your greenhouse have a water recirculation system?

Yes

No

Other (please specify)

11. How is over drain (drain water or leachate) collected in your greenhouse?

Gutters/troughs

Drain pipes in/on the ground

Other (describe)

12. Where is your over drain stored until it can be used again?

Covered storage or holding tank

Open pond outdoors

Other (describe)

13. What types of water treatment(s) are used to clean and/or disinfect over drain? Check all that apply.

- None
- Sand/gravel pre-filter
- Heat pasteurization
- Ultra violet radiation
- Ozonation
- Lava rock
- Slow sand
- Reverse osmosis
- Ultra-filtration
- Chemical (hydrogen peroxide, chlorination, chlorine dioxide and copper ionization)
- Other (describe)

14. How often is recirculated water released?

- Never
- Once per year
- Twice per year
- Other (describe)

15. What is the length of time between the application of imidacloprid and when the recirculated water is discharged? Please indicate your answer in number of days. (Enter "N/A" if not applicable).

16. If applicable, at what time of year is the recirculated water released? (Enter "N/A" if not applicable).

17. If applicable, to where and how is the recirculated water released? (Enter "N/A" if not applicable).



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Neonicotinoid Treated Seed Questions

Pre-treated commercial vegetable seed treated with neonicotinoids (imidacloprid/clothianidin) may be available for use in the production of greenhouse vegetables (tomato, pepper, lettuce, cucumber, eggplant).

18. If your greenhouse is for propagation, do you use neonicotinoid treated seed to produce transplants?

Yes

No

Other (please specify)

19. If your greenhouse is for production, do you use transplants grown from neonicotinoid treated seed?

Yes

No

Unknown

Other (please specify)



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Greenhouse Peppers

20. Do you grow Greenhouse Peppers?

Yes

No

Other (please specify)

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THIAMETHOXAM Questions for Greenhouse Peppers

(Trade Name: Flagship)

Thiamethoxam is registered for control of pepper weevils on greenhouse peppers. The PMRA has initiated a Special Review of thiamethoxam based on potential risk to aquatic invertebrates.

A survey for greenhouse pepper growers on the use of thiamethoxam, is being conducted at this time to provide important information to inform CHC's future response on PMRA's Special Review. All greenhouse pepper growers are being asked to please take a few minutes to answer the following questions.

21. How frequently do you use thiamethoxam?

- Never
- Once per year
- Twice per year
- Three times per year
- Every other year
- Sporadically
- Other (please specify)

22. When is thiamethoxam used during the production cycle of your crop? Please describe.

23. What area of the greenhouse is thiamethoxam typically applied to?

- Entire greenhouse
- A section or bay of the greenhouse
- Spot treatments
- Other (please specify)

24. How important is thiamethoxam to your Integrated Pest Management (IPM) program on pepper weevils?

- 1 = Not important
- 2 = Slightly important
- 3 = Important
- 4 = Moderately important
- 5 = Extremely important

Comments:

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Thank you for your participation.

By providing your accurate responses, it will ensure that the PMRA has accurate information that reflects how NEONICOTINOIDS are actually used in modern horticultural practice. Grower input is essential for the CHC to respond effectively to the PMRA consultation on NEONICOTINOID use.

Thank you for taking time to provide your input.