

Grower Survey on NEONICOTINOID Use in Potatoes

Introduction

Imidacloprid (e.g. trade names include Admire, Genesis, Gaucho) is registered for insect control in a wide range of horticultural crops including pome and, stone fruit, berries and small fruit, and leafy, tuberous and legume vegetables.

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 clothianidin (e.g. trade names Titan, Poncho, Prosper, Emesto Quantum) and thiamethoxam (e.g. trade names Actara, Minecto Dual, Helix, Cruiser) also due to potential risk to aquatic invertebrates.

For the CHC to respond effectively to the PMRA consultation on imidacloprid and gather information on the other two neonicotinoids, 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 15-20 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. How many acres or hectares of each crop do you grow? Please indicate your answer in either acres or hectares. (Enter "N/A" if not applicable).**

Tablestock or Processing Potatoes

Seed Potatoes

Canola

Cereals

Corn

Soybeans

Other (specify)

3. At what row width do you plant potatoes? Please indicate your answer in either inches or centimeters.

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IMIDACLOPRID QUESTIONS

(Trade Names: ADMIRE, GAUCHO, GENESIS, ALIAS, GRAPPLE, STRESS SHIELD)

*** 4. What percentage of each crop is treated with imidacloprid insecticide at least once per season by any application method? (Enter "N/A" if not applicable).**

Tablestock or Processing Potatoes	<input type="text"/>
Seed Potatoes	<input type="text"/>
Canola	<input type="text"/>
Cereals	<input type="text"/>
Corn	<input type="text"/>
Soybeans	<input type="text"/>
Other (specify)	<input type="text"/>

*** 5. How important is imidacloprid to insect management in potatoes on your farm?**

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

Comments:

6. What percentage of your potato acres are treated with imidacloprid each year, for the following?

As a seed treatment?

As an in-furrow treatment?

As a foliar spray each year?

7. What are the typical rates of imidacloprid applied on potatoes,as a seed treatment?

Name of Product Used:

Rate (mL per 100 kg seed):

8. What are the typical rates of imidacloprid applied on potatoes,as an in-furrow treatment?

Name of Product Used:

Rate (Please indicate: g OR mL/100 m row):

9. What are the typical rates of imidacloprid applied on potatoes,as a foliar spray?

Name of Product Used:

Rate (Please indicate: g OR mL/ha):

10. What is maximum number of foliar applications of imidacloprid that you would apply in potatoes?

11. Do you use imidacloprid differently on seed and tablestock/processing potatoes?

Yes or No?

If yes, how is it used differently?

12. What are the key pests you are targeting for control when choosing to use imidacloprid?

13. Do you use other insecticides for control of these key pests?

Yes or No?

If yes, please list the other insecticides.

14. How effective are the alternative products in controlling the key insects? Please explain.



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CLOTHIANIDIN QUESTIONS

(Trade Names: TITAN, PONCHO, PROSPER, NIPSIT INSIDE, CLUTCH, EMESTO QUANTUM, PROSPER EVERGOL, NIPSET SUITE)

*** 15. What percentage of each crop is treated with clothianidin insecticide at least once per season by any application method? (Enter "N/A" if not applicable).**

Tablestock or Processing Potatoes	<input type="text"/>
Seed Potatoes	<input type="text"/>
Canola	<input type="text"/>
Cereals	<input type="text"/>
Corn	<input type="text"/>
Soybeans	<input type="text"/>
Other (specify)	<input type="text"/>

*** 16. How important is clothianidin to insect management in potatoes on your farm?**

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

Comments:

17. What percentage of your potato acres are treated with clothianidin each year, for the following?

As a seed treatment?

As an in-furrow treatment?

As a foliar spray each year?

18. What are the typical rates of clothianidin applied on potatoes, as a seed treatment?

Name of Product Used:

Rate (mL per 100 kg seed):

19. What are the typical rates of clothianidin applied on potatoes, as an in-furrow treatment?

Name of Product Used:

Rate (Please indicate: g OR mL/100 m row):

20. What are the typical rates of clothianidin applied on potatoes, as a foliar spray?

Name of Product Used:

Rate (please indicate: g OR mL/ha):

21. What is maximum number of foliar applications of clothianidin that you would apply in potatoes?

22. Do you use clothianidin differently on seed and tablestock/processing potatoes?

Yes or No?

If yes, how is it used differently?

23. How important is aerial application of clothianidin?

- Not important at all.
- May be important in some seasons when ground application is not possible.
- Very important and is used routinely

24. What are the key pests you are targeting for control when choosing to use clothianidin?

25. Do you use other insecticides for control of these key pests?

Yes or No?

If yes, please list the other insecticides.

26. How effective are the alternative products in controlling the key insects? Please explain.



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THIAMETHOXAM QUESTIONS

(Trade Names: ACTARA, MINECTO DUAL, HELIX, CRUISER, ENDIGO)

*** 27. What percentage of each crop is treated with thiamethoxam insecticide at least once per season by any application method? (Enter "N/A" if not applicable).**

Tablestock or Processing Potatoes	<input type="text"/>
Seed Potatoes	<input type="text"/>
Canola	<input type="text"/>
Cereals	<input type="text"/>
Corn	<input type="text"/>
Soybeans	<input type="text"/>
Other (specify)	<input type="text"/>

*** 28. How important is thiamethoxam to insect management in potatoes on your farm?**

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

Comments:

29. What percentage of your potato acres are treated with thiamethoxam each year, for the following?

As a seed treatment?

As an in-furrow treatment?

As a foliar spray each year?

30. What are the typical rates of thiamethoxam applied on potatoes, as a seed treatment?

Name of Product Used:

Rate (mL per 100 kg seed):

31. What are the typical rates of thiamethoxam applied on potatoes, as an in-furrow treatment?

Name of Product Used:

Rate (Please indicate: g OR mL/100 m row):

32. What are the typical rates of thiamethoxam applied on potatoes, as a foliar spray?

Name of Product Used:

Rate (Please indicate g OR mL/ha):

33. What is maximum number of foliar applications of thiamethoxam that you would apply in potatoes?

34. Do you use thiamethoxam differently on seed potatoes and tablestock/processing potatoes?

Yes or No?

If yes, how is it used differently?

35. How important is aerial application of thiamethoxam?

- Not important at all.
- May be important in some seasons when ground application is not possible.
- Very important and is used routinely

36. What are the key pests you are targeting for control when choosing to use thiamethoxam?

37. Do you use other insecticides for control of these key pests?

Yes or No?

If yes, please list the other insecticides.

38. How effective are the alternative products in controlling the key insects? Please explain.



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Risk Mitigation

39. Do you use pest monitoring prior to applying one of the above insecticides by foliar application?

Yes

No

40. By using one of the above products applied as either a potato seed piece treatment or in-furrow treatment, how many total foliar applications of all insecticides are eliminated from your production system?

41. Do you have permanent vegetative buffer strips for fields adjacent to natural water bodies such as creeks, streams, rivers, ponds, lakes, marine sites?

Yes

No

42. Do you use temporary buffer strips/zones (areas not receiving pesticide treatment) for fields adjacent to natural water bodies such as creeks, streams, rivers, ponds, lakes, marine sites?

Yes

No

43. Indicate ideas for mitigating the risk to aquatic invertebrates when neonicotinoids are applied in potatoes.

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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.