

Grower Survey on NEONICOTINOID Use in Berries and Vines/Grapes

Introduction

Imidacloprid (e.g. trade names include Admire) 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, Ernesto 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. What berry and/or vine/grape crops do you grow? Please indicate your answer in either acres or hectares. (enter "NA" if not applicable).**

Caneberries (raspberries, blackberries etc.) (13-A)

Blueberries (Highbush)

Blueberries (Lowbush)

Bushberries (13-B) (Other than blueberries)

Vines including grapes (13-F)

Low growing berries (13-G)

Other (specify)

3. At what row width are the following berry and/or vine/grape crops planted? Please indicate your answer in either inches or centimeters. (enter "NA" if not applicable).

Vines including grapes (13-F)

Low growing berries (13-G)

4. Do you grow any of the following crops on your farm? Please indicate your answer in either acres or hectares. (enter "NA" if not applicable).

Potatoes

Canola

Cereals

Field or Seed corn

Soybeans

Other (specify)



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IMIDACLOPRID QUESTIONS

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

*** 5. What percentage of your berry or vine/grape crop is treated with imidacloprid insecticide at least once per season by any application method? (enter "NA" if not applicable).**

Caneberries

(raspberries,
blackberries etc.) (13-A)

Blueberries (highbush)

Blueberries (lowbush)

Bushberries (13-B)

(other than blueberries)

Vine including grape
(13-F)

Low growing berry (13-
G)

6. What percentage of other crops grown on your farm are treated with imidacloprid at least once per season by any application method? (enter "NA" if not applicable).

Potatoes

Canola

Cereals

Corn

Soybeans

Other (specify)

7. Do you use IMIDACLOPRID on berries, and/or vines/grapes on your farm?

Yes

No

Comments:

IF YOU DO NOT USE IMIDACLOPRID ON YOUR FARM GO TO CLOTHIANIDIN SECTION OF SURVEY



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IMIDACLOPRID QUESTIONS

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

8. What are the key berry and vine/grape pests controlled by imidacloprid on your farm?

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

Yes or No?

If yes, please list the other insecticides.

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

*** 11. How important is imidacloprid to insect management in berries and vine/grapes on your farm?**

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

Comments:

12. What percentage of your berry or vine/grape acres are treated with imidacloprid as soil application each year? (enter "NA" if not applicable).

Caneberries

(raspberries,
blackberries etc.) (13-A)

Blueberries (highbush)

Blueberries (lowbush)

Bushberries (13-b)

(Other than blueberries)

Vines including grapes

(13-F)

Low growing berries

(13-G)

13. What is the typical rate of application used for imidacloprid applied on berries or grapes as a soil application?

Name of Product Used:

Rate (Please indicate:

mL/ha OR mL/100

metres of row):

14. What percentage of your berry or vine/grape acres are treated with imidacloprid as foliar spray each year? (enter "NA" if not applicable).

Caneberries

(raspberries,
blackberries etc.) (13-A)

Blueberries (highbush)

Blueberries (lowbush)

Bushberries (13-b)

(Other than blueberries)

Vines including grapes

(13-F)

Low growing berries

(13-G)

15. What is the typical rate of application used for imidacloprid applied on berry or vine/grape as a foliar spray?

Name of Product Used:

Rate (mL/ha):

16. What is the typical frequency of foliar applications of imidacloprid that you would apply in berry or vine/grape?

- Once per season
- Twice per season
- Depends upon scouting and monitoring
- Other (please specify)



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CLOTHIANIDIN QUESTIONS

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

17. Do you grow strawberries or grapes on your farm?

Yes

No

Comments:

IF YOU DO NOT GROW STAWBERRIES OR GRAPES ON YOUR FARM GO TO THE THIAMETHOXAM SECTION OF THE SURVEY



Grower Survey on NEONICOTINOID Use in Berries and Vines/Grapes

CLOTHIANIDIN QUESTIONS

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

18. What percentage of your strawberry or grape crop on your farm is treated with clothianidin insecticide (CLUTCH 50WDG) at least once per season by foliar spray application? (enter "NA" if not applicable).

Strawberries

Grapes

19. What percentage of each other crop grown on your farm is treated with clothianidin? (enter "NA" if not applicable).

Potatoes

Canola

Cereals

Corn

Other (specify)

20. Do you use CLOTHIANIDIN on strawberries or grapes on your farm?

Yes

No

Comments:

IF YOU DO NOT USE CLOTHIANIDIN ON STRAWBERRIES OR GRAPES ON YOUR FARM END SURVEY



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CLOTHIANIDIN QUESTIONS

(Trade Names: CLUTCH 50WDG)

21. What are the key pests in strawberries or grapes controlled by a clothianidin on your farm?

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

Yes or No?

If yes, please list the other insecticides.

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

*** 24. How important is clothianidin to insect management in strawberries or grapes on your farm?**

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

Comments:

25. What typical rate of application of clothianidin do you use for foliar spray application?

Name of Product Used:

Rate (Please indicate: g

OR mL/ha):

26. How many foliar applications of clothianidn would you typically apply ongrapes? (enter "NA" if not applicable).

- One
- Two
- Depends based on monitoring and scouting
- Other (please specify)



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THIAMETHOXAM QUESTIONS

(Trade Names: ACTARA 25WG, HELIX, CRUISER, ENDIGO)

27. What percentage of your berry crop on your farm is treated with thiamethoxam insecticide (ACTARA 25WG) at least once per season by foliar spray application? (enter "NA" if not applicable).

Caneberries

(raspberries, blackberries etc.) (13-A)

Blueberries (highbush)

Blueberries (lowbush)

Bushberries (13-b)

(Other than blueberries)

Low growing berries (13-G)

28. What percentage of each other crop grown on your farm is treated with thiamethoxam? (enter "NA" if not applicable).

Potatoes

Canola

Cereals

Corn

Other (specify)

29. Do you use THIAMETHOXAM on berries on your farm?

Yes

No

Comments:

IF YOU DO NOT USE THIAMETHOXAM ON BERRIES ON YOUR FARM END SURVEY



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THIAMETHOXAM QUESTIONS

(Trade Names: ACTARA 25WG, HELIX, CRUISER, ENDIGO)

30. What are the key berry pests controlled by a thiamethoxam on your farm?

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

Yes or No?

If yes, please list the other insecticides.

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

*** 33. How important is thiamethoxam to insect management in berries on your farm?**

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

Comments:

34. What typical rate of application of thiamethoxam do you use for foliar spray application?

Name of Product Used:

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

35. How many foliar applications of thiamethoxam would you typically apply on berries?

- One
- Two
- Depends based on monitoring and scouting

36. If you grow low growing berries (13-07G) (e.g. low-bush blueberry, cranberry, strawberry) do you apply thiamethoxam as a post-renovation soil drench? (enter "NA" if not applicable).

- Yes
- No
- Other (please specify)



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Risk Mitigation

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

Yes

No

38. 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

39. Indicate ideas for mitigating the risk to aquatic invertebrates when neonicotinoids are applied in berries.

40. Indicate ideas for mitigating the risk to aquatic invertebrates when neonicotinoids are applied in vines/grapes.

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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.