NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Long Island Pesticide Pollution Prevention Strategy

2nd TRAC Meeting – February 26th, 2015
Agenda

09:30-10:00 - Meet & Greet, Sign In

10:00-10:15 – Introduction/Overview (Peter Scully, Scott Menrath)

10:15-11:15 – Atrazine

Topics for Discussion:

- Highlight changes made in Active Ingredient Data Package (DEC)
- Summary of possible pollution prevention measures - Review matrix of alternatives: application modifications, pesticide alternatives, non-pesticide alternatives (DEC)
- Prioritize alternatives (CCE of SC)
- How to implement priorities/what are next steps?
- Identify stakeholders (applicators, farmers, registrants, etc.)

11:15-11:30 – Break

11:30-12:45 – Metalaxyl/Mefenoxam

Topics for Discussion:

- Highlight changes made in Active Ingredient Data Package (DEC)
- Summary of possible pollution prevention measures - Review matrix of alternatives: application modifications, pesticide alternatives, non-pesticide alternatives (DEC)
- Prioritize alternatives (CCE of SC)
- How to implement priorities/what are next steps?
- Identify stakeholders (applicators, registrants, etc.)

12:45-1:15 – Lunch

1:15-2:45 – Imidacloprid

Topics for Discussion:

- Highlight changes made in Active Ingredient Data Package (DEC)
- Summary of possible pollution prevention measures - Review matrix of alternatives: application modifications, pesticide alternatives, non-pesticide alternatives (DEC)
- Prioritize alternatives (CCE of SC)
- How to implement priorities/what are next steps?
- Identify stakeholders (applicators, registrants, etc.)

2:45-3:30 – Discussions/Thoughts/Next Steps:

- When and where to schedule Stakeholder meeting?
- How to measure success?

Long Island Pesticide Pollution Prevention Strategy

Summary of the February 26 Technical Review and Advisory Committee (TRAC) Meeting

The NYSDEC Bureau of Pest Management convened a TRAC meeting on Thursday, February 26, 2015 at the Region 1 office in Stony Brook. The meeting included a brief overview of updates to the Active Ingredient Data Packages and introductions to a series of Alternatives Tables to facilitate discussion on possible pollution prevention measures and best management practices (BMPs) for atrazine, imidacloprid, and metalaxyl. A summary of the major points discussed for each of the three active ingredients is included in the tables below.

Atrazine

Selection of Primary Topics Discussed
• The atrazine data package was updated based on discussions during the October 2014 TRAC meeting and subsequent comments provided by TRAC members. Some of the major changes included: 1. Added sales and use active ingredient intensity figure by zip code 2. Alternatives section expanded 3. Added alternatives matrix as an attachment 4. Added land cover figure to illustrate residential uses along with agricultural uses 5. Summary/proposal added as Section 5 of the document
• The three categories included in the atrazine alternatives table were explained and included: 1. Modified approaches to reduce amount being applied or make applications more efficient 2. Possible alternative or pesticides to be used in rotation with atrazine 3. Possible non-pesticide alternatives
• The current maximum application rate for atrazine is 2.5 lbs ai/acre/year. There was discussion that a BMP could be developed for the use of atrazine at or below 1 lb ai/acre/year. The product labels would not need to be changed to reflect this option. In essence, this is self-regulating because higher rates have the potential to produce residual atrazine in the soil that kills later plants.
• Banding over the row with a side-dress of nitrogen is an effective option to focus the application of atrazine. This would require adjustments to the pesticide sprayers but not likely any major equipment upgrades and investments.
• The active ingredient pendimethalin contained in Prowl is an effective alternative pesticide, but there could be some concerns with late season use on corn.
• The use of forecast modeling does not apply to sweet corn production and should be removed from the alternatives table.
• The Environmental Impact Quotient (EIQ) Field Use Rating (FUR) allows for a comparison of possible environmental impacts associated with each pesticide for different uses. The lower the number, the lower the environmental impact. As part of a possible BMP, there was some discussion on having the EIQ FUR values available to users. The values could be included on guidance documents and/or on an agency's website.
• There was discussion on possibly splitting the 1 lb ai/acre/year atrazine application as part of a tank mix. One application could occur at planting and a second application later in the season for weed control.
• A concern was raised regarding the compatibility of mixing chemicals as part of a tank mix. It was discussed that tank mixing details are covered on the product label and also commonly covered during educational programs.
• Cultivation can be used as an alternative to control small weeds, to possibly keep weeds from getting established, and to possibly prevent the need for repeat atrazine applications.

- The non-pesticide option involving planting into a cover crop requires a high degree of maintenance and is not commonly used on Long Island.
- Improving and implementing scouting and mapping of weeds is important and can be incorporated into an atrazine BMP.
- A combination of outreach efforts, including development and use of fact sheets and educational programs, were discussed to promote BMPs identified as part of the atrazine assessment.
- For subsequent stakeholder meeting/s where atrazine options will be discussed, representative sweet corn farmers/growers should be invited and encouraged to participate.

Imidacloprid

Selection of Primary Topics Discussed

- The imidacloprid data package was updated based on discussions during the October 2014 TRAC meeting and subsequent comments provided by TRAC members. Some of the major changes included:
    1. Added sales and use active ingredient intensity figure by zip code
    2. Alternatives section expanded
    3. Added alternatives matrix as an attachment. This includes two (2) separate tables
    4. Added land cover figure to illustrate residential uses along with agricultural uses
    5. Summary/proposal added as Section 5 of the document
- The three categories included in the imidacloprid alternatives tables were explained and included:
    1. Modified approaches to reduce amount being applied or make applications more efficient
    2. Possible alternative or pesticides to be used in rotation with imidacloprid
    3. Possible non-pesticide alternatives
- Long Island has some of the highest use of imidacloprid in NYS. The use of imidacloprid increased as other pesticide products were no longer available.
- Use on potatoes and cucurbits as a form of soil application at planting for control of the Colorado Potato Beetle represents a critical use on Long Island. With this use, imidacloprid provides the longest residual control and long-term preventative control.
- Imidacloprid is also critical in nursery settings for managing grubs in container grown plants.
- Imidacloprid is effective in controlling the youngest stage of grubs on residential turf grass.
- For landscape settings, soil application of imidacloprid is more common. Spray applications tend to be less favorable due to potential drift.
- A new bio-type of white fly has evolved that has become resistant to imidacloprid. This is especially important for poinsettia growers. As a result, producers have started relying on Safari (which has a SLN label) for control of this white fly instead of imidacloprid.
- Imidacloprid is used in landscape settings as a soil application to control borers and boxwood leafminers. There needs to be efforts to get/convince landscapers to start using leafminer resistant plants.
- It was discussed that non-pesticide practices are currently being used such as biological controls, however, some biological controls are not very effective (i.e. a fungus that kills insects).
- The existing BMPs should be updated based on this assessment and manufacturers encouraged to distribute the BMPs with imidacloprid sales.
- If a new pesticide product is registered, collaboration should occur immediately with the groundwater quality sampling program to start testing as soon as the new product becomes available to the public.

- There are currently alternative AIs for grub control like Dylox or Trichlorfon, but they tend to be more toxic than imidacloprid. There are also some biocontrols for grubs, but they tend to not be as effective as imidacloprid.
- Some insect mating disruption material is an alternative and has reduced the need for imidacloprid, however, it is only effective for use in large areas (> 5 acres).
- Nematodes have been proven successful with controlling grubs, but this method is expensive and the nematodes become inactive once the soil temperature goes below 65 degrees Fahrenheit.
- NYS allows lower than label rates to be used (where labels don't prohibit). Where an application rate range on a label is indicated, we could possibly reduce the application rate to the minimum. A reduced application rate on the label, however, would have to be context specific. With a reduced application rate, you reduce the amount of residual pesticide.
- A major issue is that residential homeowners are not familiar with the importance of Long Island's groundwater and possible contamination to this resource related to excessive pesticides, fertilizer, and watering. Residents want safe drinking water and the greenest lawn at the same time. We can increase homeowner awareness regarding the products that their landscaper uses and that there are alternatives that can be requested. Similarly, educational programs can be developed for the landscape industry to highlight alternative active ingredients and best management practices.

Metalaxyl/Mefenoxam

Selection of Primary Topics Discussed

- The metalaxyl/mefenoxam data package was updated based on discussions during the October 2014 TRAC meeting and subsequent comments provided by TRAC members. Some of the major changes included:
    1. Added sales and use active ingredient intensity figure by zip code
    2. Alternatives section expanded
    3. Added alternatives matrix as an attachment. This includes three (3) separate tables
    4. Added land cover figure to illustrate residential uses along with agricultural uses
    5. Summary/proposal added as Section 5 of the document
- The three categories included in the mefenoxam alternatives tables were explained and included:
    1. Modified approaches to reduce amount being applied or make applications more efficient
    2. Possible alternative or pesticides to be used in rotation with atrazine
    3. Possible non-pesticide alternatives
- Metalaxyl is only used as a form of seed treatment in NYS.
- The laboratory analysis used as part of the groundwater monitoring program cannot distinguish between metalaxyl and mefenoxam and the laboratory reports results as metalaxyl.
- Mefenoxam is an important tool for managing disease in the ornamental industry. In particular, mefenoxam is critical for the control of Pythium root rot diseases.
- Because mefenoxam is not as expensive as other fungicides, is gentle on plants, and is very effective, this active ingredient is commonly relied upon even when it may not necessarily be needed. It is important to eliminate the habitual uses of mefenoxam and to only use this product when it is critically needed.
- It is important that mefenoxam users be aware that pathogens develop resistance to mefenoxam. To reduce mefenoxam use and the potential for resistance to build up, the rotation of mefenoxam with other fungicides can be included as part of a BMP for mefenoxam.
- There is a need to improve technology that helps identify the type of disease that is present.

Selection of Primary Topics Discussed
• There was discussion on possibly making mefenoxam a restricted use product (RUP). If this were to occur, it would only restrict it to the larger businesses who currently buy it in large bulk rather than restricting it to small growers; probably would only see a 25% reduction in usage. • It was then discussed that it may be beneficial to reduce restrictions on some of the other RUP fungicides. This would provide growers with more tools or alternatives and reduce the overall reliance on mefenoxam. • The use of treated seed could be beneficial, but treated seed increases cost and there is no guarantee that later mefenoxam applications will not be needed. • Several of the non-pesticide/cultural controls are particularly important for Pythium management. • The use of moisture meters with various crops could be used to prevent overwatering and conditions that lead to disease development. • Related to soil moisture content, there was discussion on the use of precision irrigation techniques to provide better control of crop irrigation. • There was discussion about growers becoming certified applicators. This would allow growers increased access to other RUP fungicides. The cost should not be a deterrent since the fee is $25. • A major Long Island distributor indicated that it would be beneficial to have fact sheets or specific guidance on mefenoxam use so that this information can be relayed to users at the point of sale. Overall, distributors can be an important part in getting BMP information out to the users. • A combination of outreach efforts, including development and use of fact sheets and educational programs, were discussed to promote BMPs identified as part of the mefenoxam assessment.

Discussion to Identify Additional Stakeholders

1. NY Alliance for Environmental Concerns
2. Long Island Nursery and Landscape Association (LINLA)
3. Long Island Flower and Growers Association (LIFGA)
4. Long Island Farm Bureau
5. NYS Arborists
6. NY Pest Management Association (NYPMA)
7. Long Island Golf Course Superintendents Association
8. NYS Turfgrass Association
9. Nassau-Suffolk Landscape Gardeners Association (NSLGA)
10. Hick's Nursery
11. Bissett Nursery
12. Green Island Distributors
13. Griffin Greenhouse Supplies
14. Long Island Cauliflower Association (LICA)
15. Citizens Campaign for the Environment (CCE)
16. Group for the East End
17. Various applicators
18. Various Long Island producers/farmers
19. Various registrants

Discussion to Identify Locations for Stakeholder Meetings

1. Suffolk County Community College (Brentwood, Selden, Riverhead)
2. Belmont Park (Elmont, NY)
3. Stony Brook University
4. Bethpage State Park
5. Suffolk County Department of Health Services, Yaphank
6. Suffolk County Water Authority Hauppauge Education Center

Long Island Pesticide Pollution Prevention Strategy
2nd TRAC Meeting (February 26, 2015) Attendees

TRAC Members	
Agency	**Individuals**
Cornell CoOp Ext. Suffolk County	Andy Senesac
NYSDEC	Anthony Lamanno
NYSDEC	Bob Phaneuf
Suffolk County Water Authority	Carrie Meek Gallagher
NYS Agriculture & Markets	Chris Logue
NYSDEC	Chris Spies
Cornell CoOp Ext. Suffolk County	Dale Moyer
Cornell CoOp Ext. Suffolk County	Dan Gilrein
Suffolk County Dept. of Health Services	Doug Feldman
NYSDEC	Jason Pelton
NYSDEC	Jeanine Broughel
Cornell Dept of Agriculture & Life Sciences	Jennifer Grant
NYS Dept. of Health	Jim Leach
Nassau County Health Dept.	John Lovejoy
Suffolk County Dept. of Health Services	Jonathan Wanlass
NYSDEC	Karen Sanford
Suffolk County Water Authority	Kevin Durk
NYS Dept. of Health	Lindsey Zehr
Cornell CoOp Ext. Suffolk County	Margery Daughtrey
Cornell CoOp Ext. Suffolk County	Meg McGrath
Suffolk Soil Water Conservation District	Paul TeNyenhuis
NYSDEC	Peter Scully
NYSDEC	Scott Menrath
Cornell University	Steve Pacenka
Non-TRAC Members	
Agency	**Individuals**
Citizens Campaign for the Environment	Adrienne Esposito
NYSDEC	Ajay Shah
Lebanon Seaboard Corporation	Andrew Cinque
Cornell University	Anna Schatz
Suffolk County Dept. of Economic Development & Planning	August Ruckdeschel
Rise	Barbara Ahern
The Seawane Club	Brian Benedict
Environmental Assessment & Remediations	Jennifer Lawrence
Glen Head Country Club	Ken Lochridge
NY Alliance for Environmental Concerns	Larry Wilson
Citizens Campaign for the Environment	Maureen Dolan Murphy
Nassau Suffolk Landscape Garndens Association	Pat Voges
Nassau Suffolk Landscape Garndens Association	Patricia Voges
LI Farm Bureau	Robert Carpenter
NYSDEC	Sarah Whelen
U.S. Geological Survey	Stephen Terracciano
NYSDEC	Syed Rahmen
Green Island Distributors, Inc.	Tom Germano
NYSDEC	Tony Leung