

Title: NYS Field Crops Weekly Pest Report- Evaluation 2007

Project Leaders:

Ken Wise, Eastern NYS IPM Program Area Educator, Livestock and Field Crops, Cornell University, klw24@cornell.edu

Julie Dennis, Western NYS IPM Program Area Educator, Livestock and Field Crops, Cornell University, js38@cornell.edu

Keith Waldron, NYS IPM Coordinator, Livestock and Field Crops, Cornell University, jkw5@cornell.edu

Cooperators: Cornell Cooperative Field Crop Extension Educators and Faculty

Type of project: Public Education

Project location: New York State

Abstract

The NYS Field Crop Weekly Pest Report provides timely pest information to field crop extension educators. The report compiles weekly pest and crop observations collected by field crop extension personnel across NYS. In addition, the weekly report provides a vehicle to disseminate other relevant IPM information such as pest identification, scouting techniques and a calendar with suggestions for pest management activities. The pest report is distributed to clientele via the Cornell In-house Field Crops List Serve and Cornell Field Crop List Serve. The audiences that subscribe to these list-servers include: Extension Educators, crop consultants, growers, agribusiness, and Cornell University Faculty. Seventeen NYS Weekly Pest Reports were published in 2007. Extension Educators and crop consultants utilize the Weekly Report as an overview of timely pest information, and have found the report useful in alerting their local clientele regarding pest management issues. About 200 people receive the pest report as an email from our Cornell University based list server. Many of the articles from the report were used in extension newsletters that reached at least 7,100 people.

Background and Justification

The NYS IPM Field Crops Pest Report is designed to inform Extension Educators and crop consultants on items of immediate pest management concern and provide a convenient news summary which can also be used in an outreach multiplier capacity with their clientele. Extension Educators and crop consultants are responsible for providing their clientele with timely information to help enhance crop and pest management decisions. The Weekly Report is written to provide educational information for Extension Educators to use in their programming, newsletters, list-serves and outreach efforts. They can select the pest information that best fits their county situation and clientele's needs. The report is a compilation of what pests were seen, and the amount and potential significance of their crop infestation that week. The pest report is short, concise and contains links to pest identification photographs and additional management information.

The report, now in its sixth year of publication, was developed by the NYS Livestock and Field Crop IPM Program Team with the involvement of several extension educators and faculty across NYS and was distributed on the Cornell Field Crops In-House and General Field Crop list-servers. These two list-servers include Extension Educators, crop consultants, growers, agribusiness, and Cornell Faculty.

Objectives

1. Provide current pest information to field crop extension educators, crop consultants, growers, agribusiness, and Cornell Faculty on a weekly basis.
2. Evaluate the impacts of the weekly pest report with clientele.

Procedures:

The NYS IPM Program Livestock and Field Crop (LFC) team worked with extension educators to identify timely pest and crop management issues. The LFC team collaborated with Extension Educators and crop consultants from across NYS who shared their local pest and crop observations. The LFC Team prepared the report based on anticipated pest occurrence and feedback on timely field observations. The report used a concise newsletter format and targeted educational articles. The LFC Team was responsible for developing, compiling and publishing the Weekly Pest Report. Regular features of the weekly report included a view from the field, soybean rust and soybean aphid update, clip board checklist, growing degree days and alfalfa weevil life stage predictions, livestock pest updates, and articles that highlight critical pest issues of the week.

Photographs and internet links to identification pictures and in-depth management practices were provided within articles where possible.

The information was formatted into the weekly report and shared with clientele via two Cornell field crop list servers. An additional list serve was utilized this season (the General Cornell Field Crops list serve) to reach crop consultants and other stakeholders. The weekly report was also posted to the NYS IPM Program website at:

<http://nysipm.cornell.edu/fieldcrops/tag/pestrpt/default.asp>.

At the completion of the growing season, Cornell extension personnel and field crop consultants were invited to complete a survey to evaluate usefulness and the potential impact of the 2007 NYS Field Crop Weekly Pest Report. The evaluation survey was conducted electronically via the In-house Cornell Field Crops Staff list-server and the General Cornell Field Crops list-server.

Results and Discussion:

The report addressed a wide variety of field crop insects, plant diseases, weeds, and vertebrate pests of concern this past season.

An index of 2007 Weekly Field Crop Pest Report topics is available at:

<http://nysipm.cornell.edu/fieldcrops/tag/pestrpt/default.asp>.

The following tables summarize the topics that were presented in the weekly pest report:

Table 1: Insect Pest Topics

Insect Pests	Alfalfa	Soybeans	Wheat	Field Corn	Clover
Alfalfa Snout Beetle	X				
Alfalfa Weevil	X				
Aphids	X	X	X		
Armyworms			X	X	
Bean Beetles		X			
Black Cutworm	X		X	X	
Cereal Leaf Beetle			X		
Clover-root curculio	X				X
Clover-stem Weevil	X				X
Common stalk borer				X	
Corn Rootworm				X	
European Corn Borer			X	X	
Hessian Fly			X		
Hopvine borer				X	
Japanese beetle		X			
Maize Billbug				X	
Mexican bean beetle		X			
Millipedes		X			
Potato leafhopper	X				

Potato stem borer				X	
Seed Corn Maggot		X		X	
Soybean Aphids		X			
Spider mites		X			
Stored Grain Pests		X	X	X	
Wireworms		X		X	
White Grubs			X	X	

Table 2: Plant Disease Topics

Plant Diseases	Alfalfa	Soybeans	Wheat	Field Corn
Anthracnose	X	X		X
Anthracnose Stalk Rot				X
Brown spot (Septoria leaf spot)		X		
Cladosporium ear and kernel rot				X
Common Rust				X
Common smut				X
Crown rots	X			
Diplodia ear rot				X
Diplodia stalk rot				X
Downy mildew	X	X	X	
Fusarium ear rot				X
Fusarium head blight			X	
Fusarium stalk rot				X
Fusarium seedling blight			X	
Fusarium wilt	X			
Gibberella ear rot				X
Gibberella stalk rot				X
Leaf & stem rust			X	
Leaf Spots	X			
Penicillium ear rot or blue eye				X
Phytophthora root rot	X			
Powdery mildew	X		X	
Pythium stalk rot				X
Pythium root rot			X	
Soybean Cyst Nematode		X		
Sclerotinia crown and stem rot	X			
<i>Sclerotinia sclerotiorum</i>		X		
Seed Decay		X	X	X
Seedling Blights		X	X	X
<i>Septoria</i> Brown Spot		X		
<i>Septoria tritici</i>			X	
Snow Mold			X	
Spring black stem	X			
Stewart's Wilt	X			
Soybean rust		X		
<i>Stagonospora nodorum</i> blotch			X	
Verticillium wilt	X			
Wheat spindle streak mosaic virus			X	
Yellow dwarf virus			X	

Table 3: Weed Topics

Weeds and Information	General	Field Corn	Alfalfa	Wheat
Corn Weed Issues				
Why weeds get into wheat fields				X
Think Weeds in the Fall!	X			
Know when weeds wake up and maintain good corn yields!				
Blind Cultivation in Corn Part I	X	X		
Blind Cultivation in Corn Part 2	X	X		
Russ Hahn's Weed Alert				
Resolve herbicide	X	X		
Impact Herbicide	X	X		
Lambsquarter Control Issues with Glyphosate	X	X		
Alfalfa Weed Issues				
Roundup ready alfalfa cannot be planted this year	X		X	

Table 4: Other Pest Information Reported

Vertebrate Pests	Alfalfa	Soybeans	Wheat	Field Corn
Birds-Field and Stored Grain		X	X	X
Deer				X
Mice-Stored Grain		X	X	X
Biological Control Agents				
Damsel bugs	X	X	X	X
Green lacewings	X	X	X	
Ground Beetles				
Lady Beetles	X	X	X	X
Parasitoids	X	X	X	X
Syrphid flies	X	X	X	X
<i>Zoophthora phytonomi</i> -Fungi	X			
Livestock Pests	Pasture	Confinement		
House fly		X		
Stable fly		X		
Horn Flies	X			
Face Flies	X			
Rat Tail Maggots		X		
Dung Beetles	X			
Other	Alfalfa	Soybeans	Wheat	Field Corn
Checking Plant Populations	X	X	X	X
Keeping Records	X	X	X	X
Slugs		X		X

Weekly Report Evaluation:

To obtain feedback on the effectiveness of the weekly pest report our users were invited to provide feedback to a survey questionnaire. Questions on the questionnaire ranged from "How useful was the pest report?" to "What did you like the most about it?" The Weekly Report Evaluation Survey questionnaire is presented in Appendix 1. Twenty-three individuals returned completed surveys via email. Survey responses were very positive indicating satisfaction with the Report's content, format, timeliness, and usefulness as a source of valuable subject matter

information for use in additional outreach situations. The following tables and figures summarize responses to survey questions:

Table 5: Responses to “We are interested in your assessment of the usefulness of the following topic items that regularly appeared in the Field Crops IPM Weekly Pest Report.”

The following feature of the NYS 2007 Weekly Field Crops Pest Report was:	Very Useful	Somewhat Useful	Not Useful
View from the field	90%	10%	---
Weekly featured articles	67%	33%	---
Pest Images / Photographs	74%	21%	5%
Soybean Rust Update	22%	67%	11%
Livestock IPM information	17%	61%	22%
Growing Degree Days in NYS	40%	50%	10%
Clipboard Checklist	39%	61%	---

Figure 1: The Internet links to additional information and identification pictures about specific pests were:

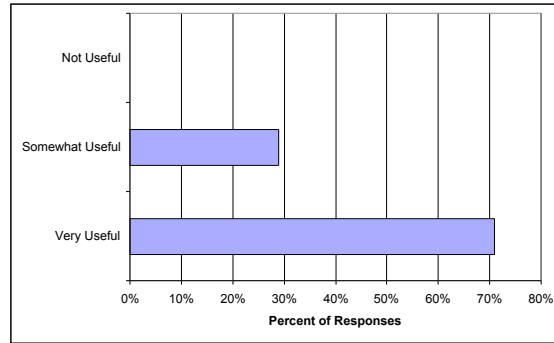
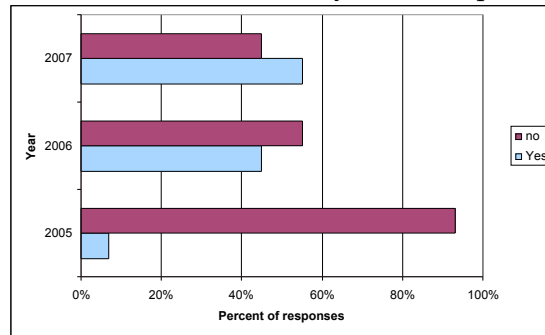
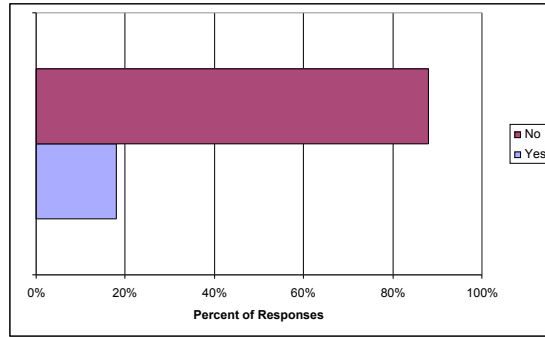


Figure 2: Did you use the web version the NYS Weekly Field Crops Pest Report?



Use of the web version of the Pest Report has been increasing over the last 3 years.

Figure 3: If you utilized the web version, do you prefer this version over the email version of the pest report?



Although the web version use has increased over the last 3 years, participants still prefer the traditional email version of the pest report, as depicted in figure 3.

Figure 4: Have you provided your clientele with the URL for them to link to the NYS Weekly Field Crops Pest Report via the web?

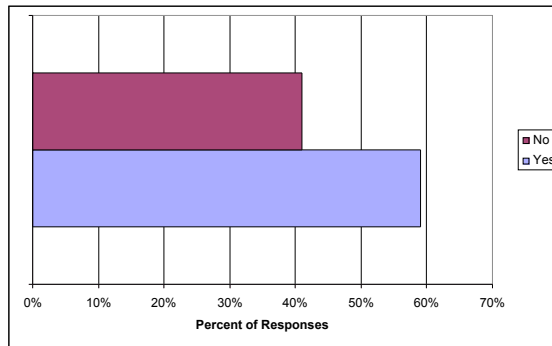
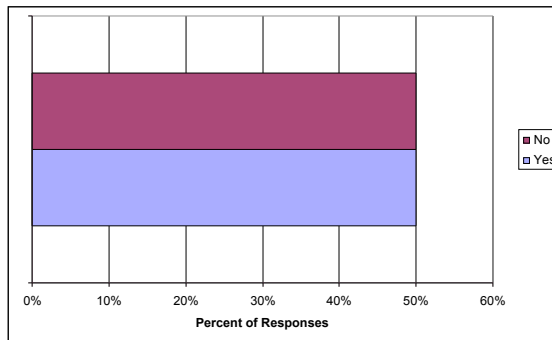
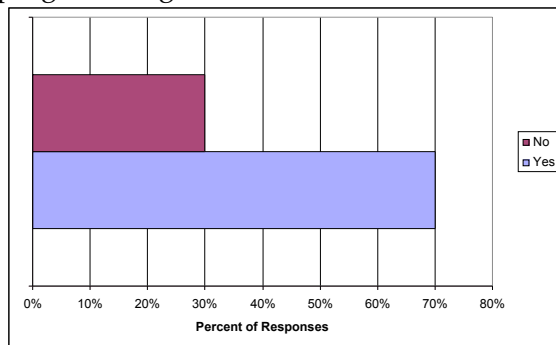


Figure 5: Have you used articles from the NYS Weekly Field Crops Pest Report in your extension programming, outreach, newsletters?



The pest report articles were used in extension newsletters that were received by 7,100 people in NYS on a regular basis throughout the growing season.

Figure 6: Have you used information from the NYS IPM Weekly Field Crops Pest Report in your extension programming and outreach (other than in newsletters)?



The IPM information in the pest report was used in many different ways in addition to extension newsletters. These included: field meetings with growers, one on one contact with growers, forwarded emails to growers and agribusiness personnel, personal knowledge of what pest problems are occurring in NYS with extension educators and crop advisors, and providing a direct internet link from agricultural related websites to the pest report.

Table 6: Selected comments to: “What did you like the most about the NYS Weekly Field Crops Pest Report?”

1. Photos, plus up-to-date pest info, also the background stuff you often provide.
2. I liked the email format- without the prompting of the email in my inbox, I probably wouldn't have read it as often. I really like the timely info on pests and the photos of the little rascals.
3. Timeliness and the fact that you can count on weekly reports; helps keep me on task and up to speed with what I may be experiencing in the field.
4. Knowing what was going on around the State, reminders of what we should be keeping an eye on when.
5. I don't really apply as a typical reader - although I do read the report. I like the short, and to the point, articles with appropriate pictures. The weekly format has got to be tough for you but great for the growers. I've only looked at the email version - not the on-line version.
6. Timeliness and pictures
7. The short reports on specific pests and crops that I could cut and past into my newsletter. The occasional report on livestock pests is also helpful.
8. Timely nature of the report, colored picture and web links
9. What's happening around the state
10. Timely articles and updates from the field
11. The format
12. Timely information, reports of pest issues and their location in the state. Supplementary information, links to web pages and great pictures. Also like the to do list.
13. Pictures and text both aided us with forecasting
14. While I did not conduct any on farm visits this season I still found your crop report a very useful tool in predicting what crop problems were close at hand. Normally you receive the problems down in your neck of the woods before we do in the North Country. By paying attention to your view from the field I pretty much knew what calls we would receive and how to deal with them in advance.
15. View from the field and clipboard checklist
16. Timely information on production oriented issues. i.e. Useful information that helped us make decisions on farm.
17. Timely and educational.
18. While I don't always get a chance to look through the weekly report right away, I have them saved and can get to them quickly as needed. It is a great source of information from around the region.
19. Quickly serves as a geographical update and check on what is occurring our location.
20. I scan for highlights and new details to put to work.

Table 7: Comments to: "What did you like the least about the NYS Weekly Field Crops Pest Report?"

1. Not a darn thing.
2. None of the images come though on my email - it just says "Emacs!"
3. I never have enough time to read it
4. I have been asked to provide organic recommendations in my newsletter. It may be a good thing for yours as well.
5. Job well done
6. Sometimes too much detail regarding pests for me
7. That the report did not come at the same time each week. Quite often it would come into the mailbox on a Friday afternoon or evening and would be inadvertently grouped with the "old news" when the new week started.
8. The report can get long
9. Nothing, doing an excellent job
10. as an email, would rather it was a PDF or word doc
11. Growing degree days - mainly because I get them from the NYS AG stat weekly reports
12. Pretty good as is.

Table 8: Comments to: "Have you used information from the NYS IPM Weekly Field Crops Pest Report in your extension programming and outreach (other than in newsletters)?"

1. Used photos for Pesticide Applicator training meetings and presentations to college students.
2. I use the information in many different ways. Mostly, it is used in discussions with farmers and crop consultants on a daily basis during the growing season.
3. On farm visits and on phone question answering.
4. Thank you for helping me so much.
5. One on One education
6. Yes, primarily when on farm visits and speaking with farmers on the phone as I answer questions or discuss the local crop climate
7. Gave updates on all crops at Tag meetings with information coming from this report and local field activities
8. I have used articles as handout for field meeting
9. The information was useful in telling our scouts what to be on the lookout for and for explaining the background of why we were looking for certain things.
10. I forwarded all of them to my crop scout, Sarah Woodard. Very useful for her training. And relied on them for four soybean TAg meetings.
11. The information in your report helps to back up what we are finding and helps give farmers an idea of what is happening around the region to be on the look out for potential problems.
12. On farm visits, and scouting fields

Table 9: Comments to: "Do you have any comments or suggestions to improve next season's NYS Weekly Field Crops Pest Report to better suit your field crop IPM needs and those of your clientele?"

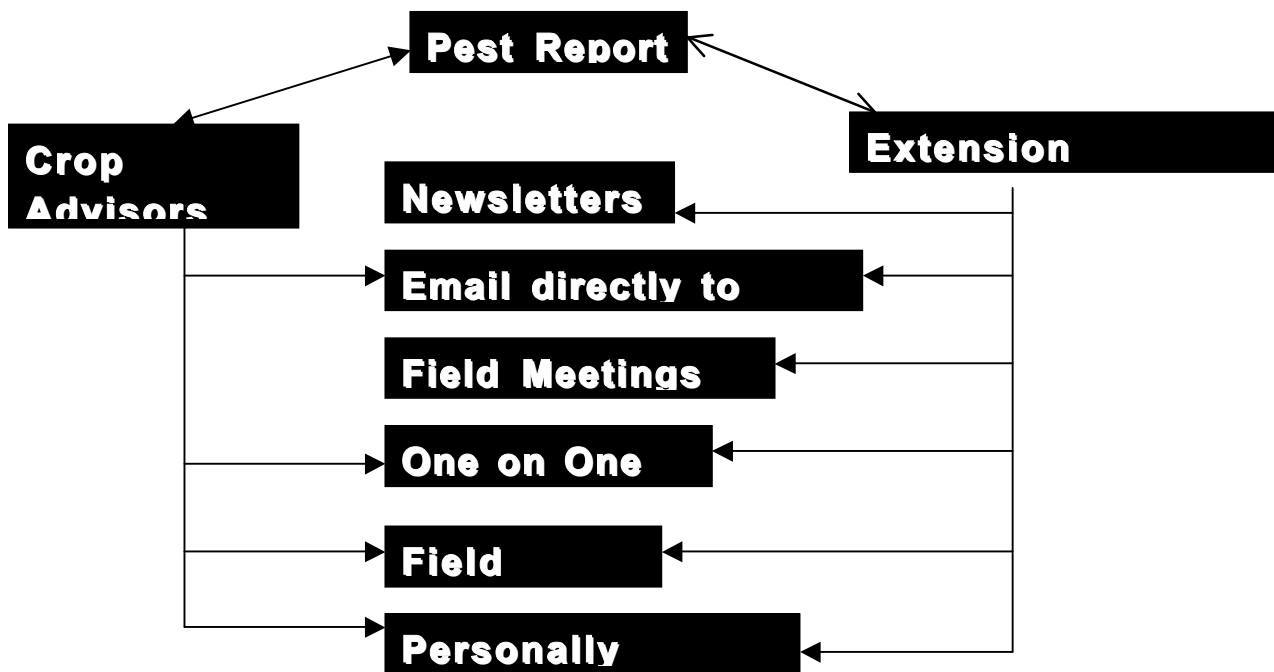
1. I never received the web version and the email version of the report on the same day. It seemed like the web one always came a day later.
2. It is great
3. Put the link to the URL right at the front of the newsletter as a reminder
4. Have the report in our mailboxes by mid week
5. This is a well read piece. I get great feedback from local agribusinesses especially. Engaging Cornell staff to think about the practical application of their research and package it into bulleted statements that can fit into this newsletter in a timely fashion. i.e. Russ including info on herbicide choices for specific weed scenarios, Bill Cox hitting populations for crops, Harold commenting on tillage practices, Q commenting on timing of fertilizer application, calculating rates of N, calculating fertilizer value of manure etc.

6. Some articles could be more printer friendly
7. I think you should get a link to your newsletter on the Purdue Chat n' Chew Cafe website. Also, timely notices on other agronomic issues would be helpful. The Penn State Field Crop Newsletter is a good model.
8. If I eventually have a core group of farmers that use computers, it might be useful to have a version without graphics and photos, for those who only have dial-up Internet service. But first I would test the current format with them.

The Weekly Pest Report enhances our educational outreach by sharing information with extension personnel, crop advisors, and other agriculture professionals who multiply outreach through their direct contact with growers. Clientele feedback provides information useful to maintaining the focus and effectiveness of this publication.

This years posting of the Weekly Pest Report to the General Cornell Field Crops list serve, in addition to other CCE field crop list serve and the web is in response to suggestions made in last years program evaluation. Figure 7 depicts how weekly pest report information was gathered and used in NYS.

Figure 7: Flow chart on the inter-dynamics of the how the IPM Field Crops Pest Report is used in New York State



A second new feature to this seasons report was the inclusion of Dr. Russ Hahn's (Extension Weed Science Professor) "Weed Alerts". In this feature Dr. Hahn provided short timely updates on research-based herbicide information growers could apply to their farming operations. These articles featured information on new herbicides, and concerns over possible herbicide resistance and/or tolerances.

Summary

Seventeen NYS Weekly Pest Reports were published in 2007. Extension Educators and crop consultants utilized the Weekly Report as an overview of timely pest information, and have found the report useful in alerting their local clientele regarding pest management issues. About 200 people received the pest report as an email from our two Cornell University based list

servers. Many of the articles from the report were used in extension newsletters that reached at least 7,100 people.

We are reaching many growers with critical pest information and alerts weekly in NYS both through extension educators and crop consultants. Currently, we disseminate IPM information through Extension Educators and other multipliers such as crop consultants. Traditionally, the pest report was only sent to extension educators that would extend the information to growers as needed. To enhance outreach this year the report was also forwarded to the Cornell General Field Crops list-server whose subscribers include crop consultants, growers, agribusiness, and Cornell Faculty. While Extension Educators find the report very useful many crop consultants and other users also expressed satisfaction with the report and found it extremely useful to their work .

The weekly report has been an effective means to share timely Livestock and Field Crop IPM information with clientele including extension personnel, consultant, growers, and others in the agriculture community. We have been pleased with the positive feedback received from clientele through our end of season survey, the use of articles in county extension publications and the ease of access afforded by the report being available on the world wide web.

The Weekly Field Crop Pest Report was honored by the NYS Association of County Agriculture Agents with an Outstanding New Extension Publication award at the CCE In-Service in Ithaca, November 2007.

Samples of materials:

A link to archived NYS IPM Field Crops Pest Reports is available on-line at:
<http://nysipm.cornell.edu/fieldcrops/tag/pestrpt/default.asp>

Appendix 1: NYS IPM Field Crops Pest Report Survey 2007

Your input on the effectiveness of the NYS Weekly Field Crops Pest Report is important to us. By providing your perspective you can help us design the report to better fit your extension needs in the future. Please take a minute to complete the following survey questionnaire. Indicate your answer by placing an "X" on the line or a response to the specific questions about the 2007 Weekly NYS Field Crops Pest Report. *Thanks for your help!*

1. The NYS 2007 Weekly Field Crops Pest Report was:

Very Useful ____ Somewhat Useful ____ Not Useful ____

2. What did you like the most about the NYS Weekly Field Crops Pest Report?

3. What did you like the least about the NYS Weekly Field Crops Pest Report?

4. We are interested in your assessment of the usefulness of the following topic items that regularly appeared in the Field Crops IPM Weekly Pest Report.

	Very <u>Useful</u>	Somewhat <u>Useful</u>	Not <u>Useful</u>
View from the field	_____	_____	_____
Weekly featured article(s)	_____	_____	_____
Pest Images / Photographs	_____	_____	_____
Soybean Rust Update	_____	_____	_____
Livestock IPM information	_____	_____	_____
Growing Degree Days in NYS	_____	_____	_____
Clipboard Checklist	_____	_____	_____

Comments:

5. The Internet links provided in the NYS Weekly Field Crops Pest Report to additional information and identification pictures about specific pests were:

Very Helpful ____ Somewhat Helpful ____ Not Helpful ____

6. Did you use the web version the NYS Weekly Field Crops Pest Report?

Yes ____ No ____

-If yes, do you prefer the web version over the email version of the pest report?

Yes ____ No ____

7. Have you provided your clientele with the URL for them to link to the NYS Weekly Field Crops Pest Report via the web?

Yes ____ No ____

8. Have you used articles from the NYS Weekly Field Crops Pest Report in your newsletters?

Yes ____ No ____

-If yes, please indicate the name of the newsletter and the number of people that are targeted to receive it.

9. Have you used information from the NYS IPM Weekly Field Crops Pest Report in your extension programming and outreach (*other than in newsletters*)?

- If yes, please explain (For example, information was useful at an on-farm meeting, or farm visit; or information was useful for scout training, etc.)

10. Do you have any comments or suggestions to improve next season's NYS Weekly Field Crops Pest Report to better suit your field crop IPM needs and those of your clientele?

Thank you for taking the time from your busy schedule to complete this evaluation