

## **Title: NYS Field Crops Weekly Pest Report- Evaluation 2009**

### **Project Leaders:**

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**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 and agricultural professionals. 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 via the Cornell general and "In-house" Field Crops List Serves. Subscribers to these list-servers include: Extension Educators, crop consultants, growers, agribusiness, and Cornell University Faculty. Twenty-two issues of the NYS Weekly Pest Report were published in 2009. 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 220 people receive the pest report as an email from our Cornell list serves. Many articles from the report were also used in extension newsletters that reached at least 9000 people. In addition the Weekly Pest Report is available to readers via the NYS IPM Program website.

### **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 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 recent pest observations, and the amount and potential significance of their crop infestation. The pest report is short, concise and contains links to pest identification photographs and additional management information. Much of the pest alert information is obtained through a weekly conference call with extension field crop educators. This conference call is funded through a grant by Cornell Cooperative Extension.

The report, now in its eighth 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. The pest report is distributed electronically on the Cornell general and “In-House” Field Crop list-serves and the NYS IPM Program website.

**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

**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. Many of these field observations were communicated by extension educators via a weekly field crop field crop IPM conference call. 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, weather outlook, soybean rust and soybean aphid update, clipboard checklist, growing degree days and alfalfa weevil life stage predictions, livestock pest updates, and articles highlighting critical, timely or emerging pest issues. 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 Cornell general and “In-House” Field Crop list-serves, 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 2009 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 2009 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**

<i>Insect Pests</i>	<b>Alfalfa</b>	<b>Soybeans</b>	<b>Wheat</b>	<b>Field Corn</b>	<b>Clover</b>
Alfalfa Snout Beetle	<b>X</b>				
Alfalfa Weevil	<b>X</b>	<b>X</b>			
Aphids	<b>X</b>		<b>X</b>	<b>X</b>	
Armyworms			<b>X</b>	<b>X</b>	
Bean Leaf Beetle		<b>X</b>			

Black Cutworm			X	X	
Cereal Leaf Beetle			X		
Clover Leaf Weevil	X				X
Clover-root curculio	X				X
Clover Stem Weevil	X				X
Corn Rootworm				X	
European Corn Borer				X	
Hessian Fly			X		
Japanese beetle		X		X	
Potato leafhopper	X	X			
Slugs		X		X	
Seed Corn Maggot		X		X	
Soybean Aphids		X			
Spider Mites		X			
Stored Grain Pests		X	X	X	
Tarnished Plant Bug	X				
Western Bean Cutworm				X	
Wireworms		X		X	
White Grubs			X	X	

**Table 2: Plant Disease Topics**

<i>Plant Diseases</i>	<b>Alfalfa</b>	<b>Soybeans</b>	<b>Wheat</b>	<b>Field Corn</b>
Anthracnose	X	X		X
Anthracnose Stalk Rot				X
Bacterial blight		X		
Bacterial pustule		X		
Brown Root Rot	X			
Brown spot (Septoria leaf spot)		X		
Cercospora leaf blight		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	
Eyespot root rot			X	
Fusarium ear rot				X
Fusarium head blight			X	
Fusarium stalk rot				X
Fusarium wilt	X			
Frogeye leaf spot		X		
Gibberella ear rot				X
Gibberella stalk rot				X
Glume Blotch			X	

<b>Plant Diseases (<i>continued</i>)</b>	<b>Alfalfa</b>	<b>Soybeans</b>	<b>Wheat</b>	<b>Field Corn</b>
Gray Leaf Spot			X	
Leaf & stem rust		X	X	
Leaf Spots	X			
Leptosphaerulina Leaf Spot	X			
Northern Leaf Spot			X	
Northern Corn Leaf Blight			X	
Penicillium ear rot or blue eye				X
Phoma			X	
Phytophthora root rot	X			
Purple sheath spot			X	
Powdery mildew	X		X	
Pythium	X			
Pythium stalk rot				X
Rhizoctonia	X		X	
<i>Sclerotinia sclerotiorum</i>	X	X		
Seed Decay		X	X	X
Seedling Blights		X	X	X
<i>Septoria tritici blotch</i>			X	
Snow Mold			X	
Soil borne mosaic virus			X	
Soybean rust		X		
Spring Black Stem	X			
<i>Stagonospora nodorum blotch</i>			X	
Straw Breaker			X	
Stored Grain Pests		X	X	X
Verticillium wilt	X			
Wheat rust			X	
Wheat spindle streak mosaic virus			X	
Yellow dwarf virus			X	

**Table 3: Weed Topics**

<b>Weeds and Information</b>	<b>General Weeds</b>	<b>Field Corn</b>	<b>Soybean</b>	<b>Livestock</b>	<b>Wheat</b>
	X	X			
Do weeds indicate insect pests present?	X	X			
Yellow nutsedge	X	X			
Glyphosate-Resistant Lambsquarters	X	X	X		
Think Weeds in the Fall!	X	X	X		
Invasive species and Plants affecting Livestock	X	X		X	
Fall Weed Management in Winter Wheat	X	X			X

**Table 4: Other Pest Information Reported**

<b>Vertebrate Pests</b>	<b>Alfalfa</b>	<b>Soybeans</b>	<b>Wheat</b>	<b>Field Corn</b>
Birds-Field and Stored Grain		X	X	X
Deer				X
Mice-Stored Grain		X	X	X

<b>Biological Control Agents</b>				
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			

<b>Livestock Pests</b>	<b>Pasture</b>	<b>Confinement</b>
Dung Beetles	X	
Face Fly	X	
Horn Fly	X	X
House Fly		X
Stable Fly	X	X
Pasture Fly Traps	X	
Invasive species and plants affecting Livestock	X	

<b>Other</b>	<b>Alfalfa</b>	<b>Soybeans</b>	<b>Wheat</b>	<b>Field Corn</b>
Checking Plant Populations	X	X	X	X
Frost Damage		X		X
Keeping Records	X	X	X	X

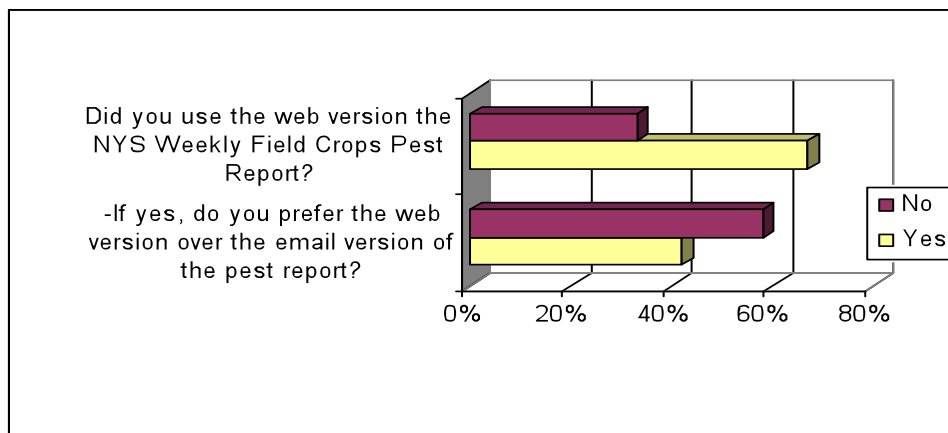
**Weekly Report Evaluation:**

To obtain feedback on the effectiveness of the weekly pest report our users were invited to respond 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. Fourteen 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:

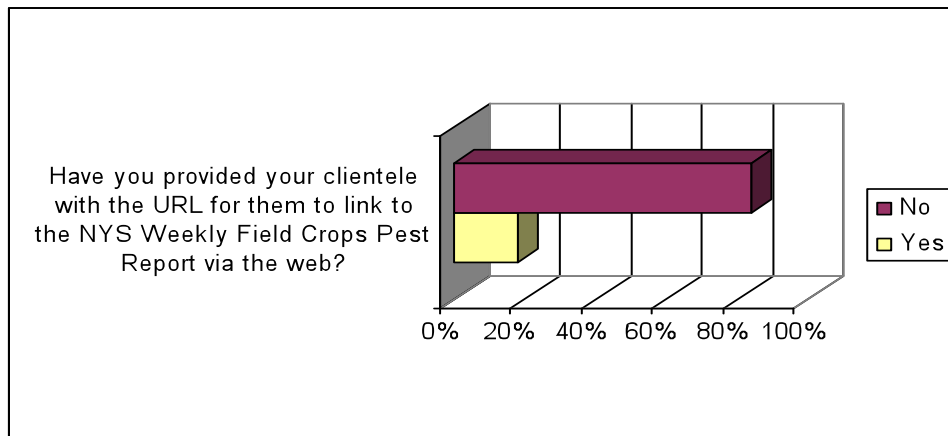
**Table 5: Responses to “We are interested in your assessment of the usefulness of the following topic items that regularly appeared in the Field Crops IPM Weekly Pest Report.”**

	<b>Very Useful</b>	<b>Somewhat Useful</b>	<b>Not Useful</b>
<b>The NYS 2009 Weekly Field Crops Pest Report was:</b>	<b>80%</b>	<b>10%</b>	<b>0%</b>
<b>Feedback on regular articles:</b>			
<b>View from the field</b>	<b>80%</b>	<b>10%</b>	<b>14%</b>
<b>Weather Outlook</b>	<b>46%</b>	<b>38%</b>	<b>16%</b>
<b>Weekly Featured article(s)</b>	<b>77%</b>	<b>23%</b>	<b>0%</b>
<b>Pest Images / Photographs</b>	<b>92%</b>	<b>8%</b>	<b>0%</b>
<b>Soybean Rust Update</b>	<b>10%</b>	<b>50%</b>	<b>40%</b>
<b>Clipboard Checklist</b>	<b>23%</b>	<b>62%</b>	<b>15%</b>
<b>Internet Links</b>	<b>78%</b>	<b>22%</b>	<b>0%</b>

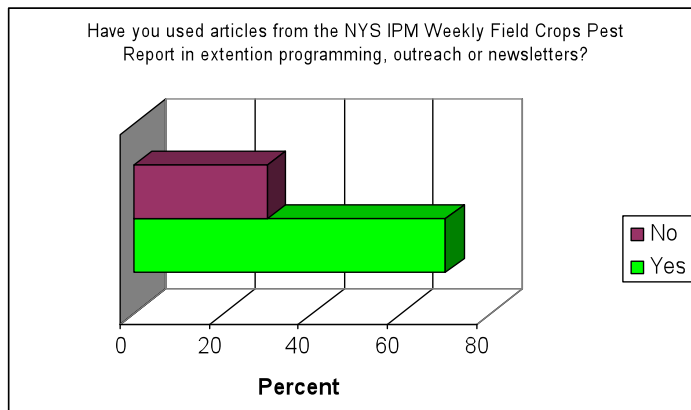
**Figure 1: Did you use the web version the NYS Weekly Field Crops Pest Report?**



**Figure 2: Have you provided your clientele with the URL for them to link to the NYS Weekly Field Crops Pest Report via the web?**



**Figure 3: Have you used articles from the NYS Weekly Field Crops Pest Report in your extension programming, outreach, or newsletters?**



The pest report articles were used in extension newsletters that reached approximately 9,000 people in NYS on a regular basis throughout the growing season. 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?”**

**Most consistent response involved an appreciation for the “timeliness” of the report topics.**

-The timeliness of the information. It was also very pertinent.
-Timely comments and write-ups on pests of the weeks
-Photos, very current info.
-Current update, focused, color photos
-It is very timely information. Often when I am busy and lose track of time I count on the pest report to remind me of what pest issues to be on the lookout for.
-Real-time pest observations/reports from other regions of the state, and the guidance on their significance and how to treat.
-I liked that I could just forward the entire thing to my growers.
-Early notification on possible pest problems and informational links as Im not an expert such as our coordinators -I liked View From the Field the most. It would be great to have more input (more views) in this section.
-Timeliness of the report
-View from the field
-The overall system of looking at a variety of crops
-Timely information, links for more information, good pictures, task list
Yes, cut the Clipboard Checklist, to make it tighter and easier to read.
-The main strength of the weekly pest report is exactly what its name says; to provide current info on stuff really happening in the field..
-Thanks for a job well done, a valuable publication, and keep up the good work!

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

Clipboard checklist.
Can't think of anything
Nothing
Weather Outlook is what I liked the least.
Soybean rust update but only because I have never dealt with soybeans
Would like to see more on livestock
Some crops are not as important in the Hudson Valley
Repetitive at times
The weather report is a little confusing to me, and maybe only to me, because it talks about this week and last week but gives not dates, so I am never sure exactly which days they are talking about.
Generic info should be kept to a minimum, to make it easier to rapidly absorb the "breaking news"

**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)?”**

-A few farm visits in the early season for identification and scouting starts, and phone calls from farmers- 32 contacts for the season including gray spot and corn fungal diseases at a farm meeting. Also used information to update SWCD & FSA for picture around the state incl county information in monthly reports.
-For informing my students in my classes at SUNY Cobleskill
-Used as a resource for my scouting with contract clientele - crop management consulting
-Yes pictures used to develop powerpoints
-Used it on farm visits and farmer phone consultations
-I have used the information for several farm visits and also utilized it during our CCE Shop Meeting Series

**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?”**

-I think it is great what you do and how it is done- I do admit to also using Penn States Crop Weekly for articles as well so between the two in my neck of the woods I am covered- Thanks!
-Continue the good work and keep the pictures coming.
-Keep up the good work!
-Keep calendar current via other extension programs in your region calendar of events
- Include small grains, pasture and hay in a bit more focus
-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.
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In 2008 we began adding more current statewide field crop pest observations gleaned from reports provided by CCE personnel in a weekly conference call.

### **Summary**

Twenty-two NYS Weekly Pest Reports were published in 2009. Extension Educators, crop consultants, agribusiness personnel, growers and others 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. For example soybean aphid (SBA) infestations were high this year and we were able to alert Extension Educators, crop consultants and growers about the issue. Many growers were able to scout their fields to determine if SBA was over the economic threshold and plan for management actions. A second example a new corn pest called western bean cutworm (WBCW) was found in Western NY. We were able to alert our clientele about this issue and WBCW was found in other locations in the state. About 220 people received the pest report as an email from our two Cornell University based field crops list serves. Many of the articles from the report were used in extension newsletters that reached at about 9,000 people. In addition, the Weekly Pest Report is available more generally through our NYS IPM Field Crops website. We are reaching many growers with critical pest information and alerts weekly in NYS both through extension educators and crop consultants.

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.

### **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>

**Key Words:** alfalfa, clover, field corn, small grains, soybeans, wheat, insect pests, leaf diseases, pod diseases, root diseases, stalk diseases, stem diseases, weeds, biological control, chemical control, cultural control, demonstration/implementation (TAg), economic analysis, monitoring, research & education, IPM, integrated pest management,

## Appendix 1: NYS IPM Field Crops Pest Report Survey 2009

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 2009 Weekly NYS Field Crops Pest Report. *Thanks for your help!*

1. The NYS 2009 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.

Featured Articles / Topics	Very Useful	Somewhat Useful	Not Useful
View from the field			
Weather Outlook			
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

*Your input is greatly appreciated!*