

Title: NYS Field Crops Weekly Pest Report- Evaluation 2006

Project Leaders:

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Cooperators: Cornell Cooperative Field Crop Extension Educators

Type of project: Public Education

Project location: New York State

Abstract

The purpose of the NYS Field Crop Weekly Pest Report is to provide 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 via the Cornell University Field Crops Staff List Serve and the Cornell In-house Field Crops List Serve. Nineteen NYS Weekly Pest Reports were published in 2006. Extension Educators 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. This report details the results of a survey sent to field crop extension educators at the conclusion of the 2006 growing season to measure the impact of the weekly pest report. The NYS Field Crop Weekly Pest Report can be viewed at this website: <http://nysipm.cornell.edu/fieldcrops/tag/pestrpt/default.asp>

Background and Justification

Field Crop Extension personnel are responsible for providing their clientele with timely information to help enhance crop and pest management decisions. The weekly field crops pest report in NYS was meant to provide Extension Educators with timely information on specific pests during the on-going course of the growing season. The report was developed by the Livestock and Field Crop IPM Program Team with the involvement of several extension educators across NYS. The pest report was distributed on the Cornell Field Crops In-House List Sever. The report was a compilation of what pests were seen, and the amount and potential significance of their crop infestation that week. The Weekly Report was written to provide educational information for Extension Educators to use in their programming, newsletters, list-serves and outreach efforts. The objective of the pest report is to inform Extension Educators on items of immediate pest management concern and provide a convenient news summary that can also be used in an outreach multiplier capacity with their clientele. Extension Educators can select the pest information that best fits their county situation and clientele's needs. The pest

report is short, concise, and contains links to pest identification photographs and additional management information.

Objectives

1. Provide current pest information to field crop extension educators on a weekly basis.
2. Evaluate the impact on the weekly pest report with field crop extension educators.

Procedures:

Field corn, soybeans, wheat, and alfalfa IPM issues were the principal topics for this year's Weekly Pest Reports. We also reported on other crops and included articles on common livestock insects this year. The Livestock and Field Crop IPM Program Team was responsible for developing, compiling and publishing the Weekly Pest Report. Extension Educators, TAg Team scouts, and others from across NYS shared their local pest observations with the LFC Team who then prepared the report using a concise newsletter format and targeted educational articles. Within the information provided were internet links to identification pictures and in-depth management practices. The nineteen issues of the 2006 Weekly Report addressed a wide variety of insect pests, plant diseases, weeds, and vertebrate pests that occurred in field crops during 2006. The following pest : crop topics were presented in the weekly pest report:

Table 1: Insect Pests Reported

<i>Insect Pest</i>	Alfalfa	Soybeans	Wheat	Field Corn	Clover
Alfalfa Snout Beetle	X				
Alfalfa Weevil	X				
Aphids	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			
Potato leafhopper	X				
Potato stem borer				X	
Seed Corn Maggot		X		X	
Soybean Aphids		X			
Stored Grain Pests		X	X	X	
White Grubs			X	X	

Table 2: Plant Diseases Reported

<i>Plant Disease</i>	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 blotch</i>			X	
Soybean rust		X		
<i>stagonospora nodorum blotch</i>			X	
Verticillium wilt	X			
Wheat spindle streak mosaic virus			X	
Yellow dwarf virus			X	

Table 3: Weed Information Reported

<i>Weeds and Information</i>	General Weeds	Field Corn	Alfalfa
Common Ragweed is Resistant to What?	X	X	
Do weeds indicate insect pests present?	X	X	
Fall Weed Survey	X	X	X
Field Bindweed	X	X	
Hedge Bindweed	X	X	
How many seeds can a weed produce	X	X	
Velvetleaf Causes Yield Reduction	X	X	
Weed Emergence Models	X		
Weeds indication of soil condition	X	X	
When do weeds wake up?	X		
Wild Buckwheat	X	X	
Yellow Nutsedge	X	X	
Blind Cultivation-Alternative Weed Control		X	

Table 4: Other Pests and Related Topics Reported

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

<i>Beneficial Organisms</i>				
Damsel bugs	X	X	X	X
Green lacewings	X	X	X	
Ground Beetles				X
Lady Beetles	X	X	X	X
Parasitoids	X	X	X	X
Syrphid flies	X	X	X	X
<i>Zoophthora phytonomi</i> -Fungi	X			

<i>Livestock Pests</i>	Pasture	Confinement
House fly		X
Stable fly		X
Horn Flies	X	
Face Flies	X	
Rat Tail Maggots		X

<i>Other</i>	Alfalfa	Soybeans	Wheat	Field Corn
Checking Plant Populations	X	X	X	X
Keeping Records	X	X	X	X
Slugs		X		X

At the completion of the growing season Cornell extension personnel were invited to complete a survey to evaluate usefulness and potential impact of the 2005 NYS Field Crop Weekly Pest Report. This survey was conducted electronically via the Cornell Field Crops Staff list-server. Further comments and suggestions about the NYS Field Crops Pest Report were made at the CCE Ag Systems In-Service Training in Ithaca during a presentation to field crop Extension Educators.

Results and Discussion:

The Weekly Report Evaluation Survey questionnaire is presented in Appendix 1. Completed surveys were returned by 21 individuals, approximately a 30% return rate. Survey responses were very positive indicating user satisfaction with content, format, timeliness, and as a source of valuable subject matter information for use in additional outreach situations. The following are tables and figures summarizing the percent of responses provided to specific questions regarding the usefulness and impacts of the weekly pest report.

Table 1: Responses “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 Useful	Somewhat Useful	Not Useful
NYS 2006 Weekly Field Crops Pest Report	81%	19%	0%
View from the field	86%	14%	0%
Weekly featured article(s)	65%	35%	0%
Pest Images / Photographs	95%	5%	0%
Soybean Rust Update	47%	42%	11%
Livestock IPM information	35%	50%	15%
Growing Degree Days in NYS	45%	30%	25%
Clipboard Checklist	65%	35%	0%
Use of internet links	84%	16%	0%

Figure 1: “The length of the weekly New York Field Crops Pest Report was: *Just Right, Too Long, Too Short*”.

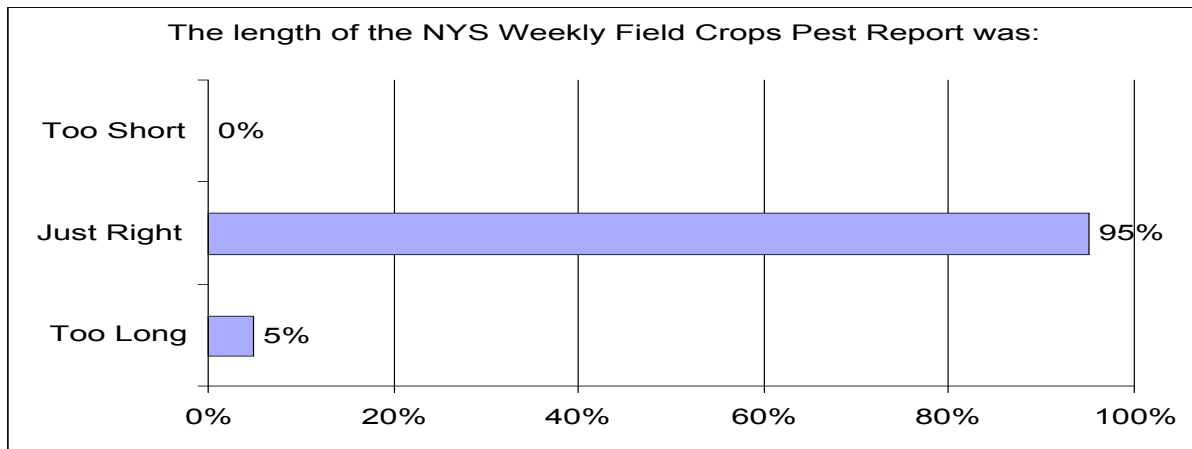


Figure 2: “Was the file size of the NYS Weekly Field Crops Pest Report ok for your email system was: Yes, Not Sure, No”.

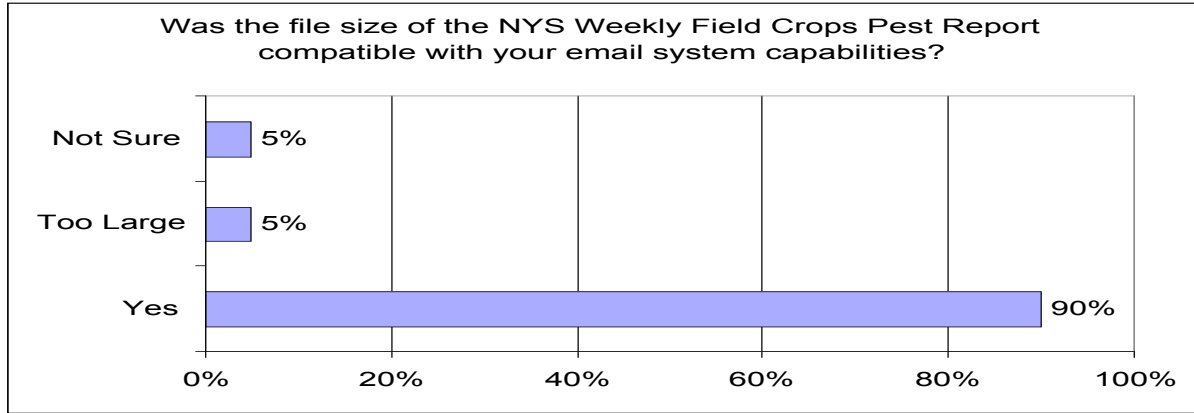


Figure 3: “The Internet links provided in the New York Field Crops Pest Report to additional information and identification pictures about specific pests” were: Very Helpful, Somewhat Helpful, Not Helpful”

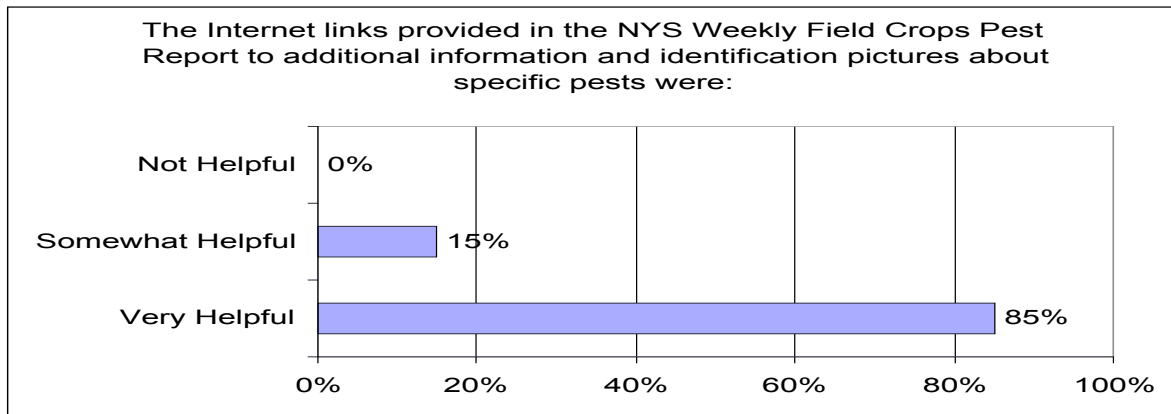


Figure 4: “Did you use the web version the NYS Weekly Field Crops Pest Report,” was: Yes, No.

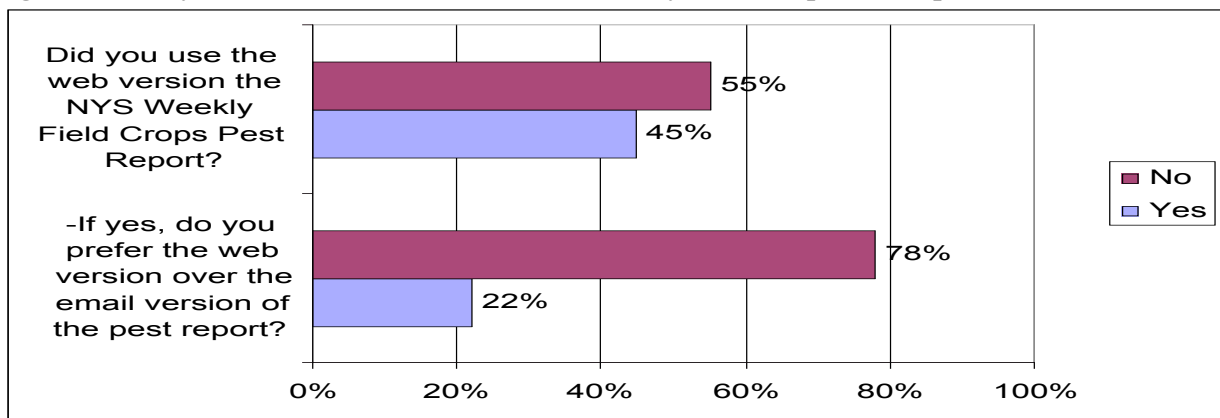


Figure 5: Have you provided your clientele with the URL for them to link to the NYS Weekly Field Crops Pest Report via the web, was: *Yes, No.*

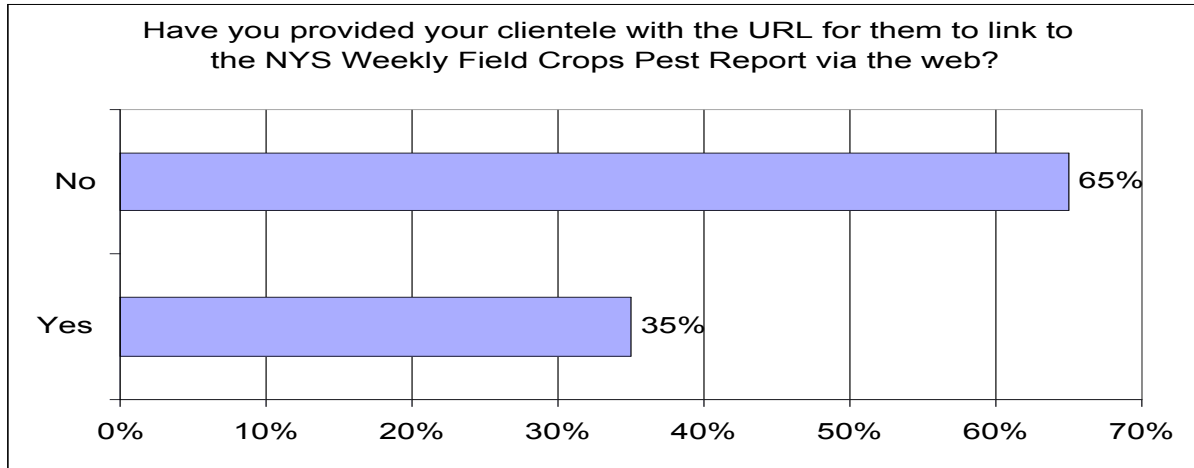
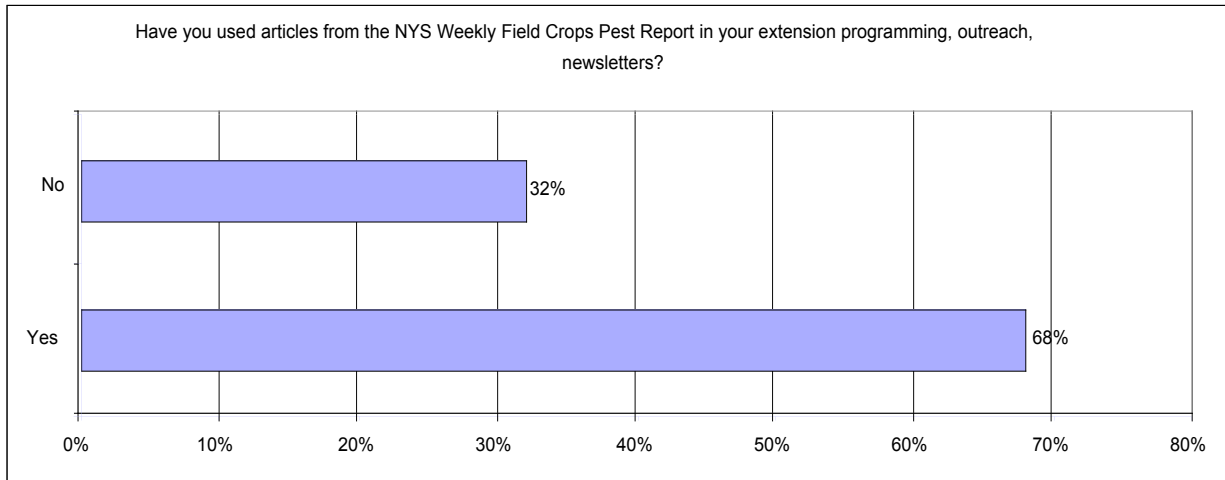


Figure 6: Have you used articles from the NYS Weekly Field Crops Pest Report in your extension programming, outreach, newsletters, was, *Yes, No.*



Total Distribution in Newsletters and email was 20,000 people.

Comments to specific questions:

“What did you like most about the NYS Weekly Field Crops Pest Report?”

- Up to date information from around the state lets me know what is going on.
- Timely regional information applicable to all (4)
- Photos, scouting charts (3)
- The reminders of pest & recommendations for control (2)
- Was able to compare my notes to others from around the state.
- View from the field. Because most of the reports were from the south of Lewis County. In most cases it gave us an advance warning of what was coming our direction.
- It enabled me to track trends and forecast-somewhat accurately, where we were headed.
- Updates on pest problems from other areas of the state (other than western NY)

“What did you like most about the NYS Weekly Field Crops Pest Report?” (continued)

- Current things from the field, and refreshers of things to expect
- Receiving breaking reports from experts in a timely fashion, plus the educational value.
- Clipboard Checklist, insect/pest update
- Brief, User-Friendly

“What did you like least about the NYS Weekly Field Crops Pest Report?”

- Nothing not to like (4)
- Good report
- PDF link for printing
- I was not always around to read it in a timely manner
- Very little guidance for us large scale organic producers.
- Only because we did not scout any soybean fields, the soybeans rust updates were of little use. However, it was still very informative.
- Sometimes the articles were quite long and difficult to stay focused on
- Too little organic information

“Was the file size of the NYS Weekly Field Crops Pest Report compatible with your email system capabilities?”

- I surveyed my "Ag Report" subscribers. They have dial-up connections and would like a link to a picture rather than having pictures in the email message.
- With DSL it is hard to say. On dial up I don't know how it would be.
- Yes, BUT our computers are extremely slow. Therefore it helps to cut any non-essential graphics, such as the color header (as pretty as it is)

“How can the NYS Weekly Field Crops Pest Report be improved to better suit your field crop IPM needs and those of your clientele?”

- Any fact sheets that are linked to the report that we can send out to the growers would be helpful
- Add in articles on crop mgmt ie PSNT, soil temps in spring for corn and soy planting, NDFs of alfalfa and grass in 1st cut, moisture content of corn near silage harvest ect.
- Continue to maintain the high quality of information available
- More on corn rootworm, and difference between corn borer.
- It would be nice if images had links to them rather than being in the email, and keep sections as concise as possible.
- Suggestion on other questions: save photos and pdf
- More detail of the pests (and their damage) I was scouting (CRW Beetles, Soybean diseases aside from Rust, Potato Leaf Hopper, etc.), but maybe in layman terms. Too scientific at times.
 - Somehow prove to the clientele the amount of money lost per acre due to pests, compared to money saved by using a comprehensive IPM system.
- More Organic Farmer-Friendly Information
- Not sure, but will send a e-mail if I have an idea or hear of one
- No strong feelings. It's very very good as is. Important to not let it get too long. Make sure to keep high alert/action items separate from gen. info.
- You can add additional information. More info.
- More organic farming related information please.

“Do you have any other comments or suggestions to improve next season's NYS Weekly Field Crops Pest Report”

- Keep close track of the FieldCropsL bulletin board in case there are questions, etc. that you can help with. I assume you're doing this so its not really a suggestion.
- A weekly weed section with pics of different weed stages ie seedling, growing, and flowering
- Good job
- Sometimes the letter would come late on Friday afternoons. I prefer the Thursday arrival it normally followed as I was more likely to read it, either that day or first thing on Friday morning.

“Do you have any other comments about the weekly New York Field Crops Pest Report”

- Fact sheets or ready made articles to include in Newsletters
- I appreciate being on this list. We credit you and/or the pest report whenever we use something from it.
- A great resource to use both before and after scouting each week.

“What other IPM educational resources would be helpful for your extension programming”

- Video clips showing scouting methods ie for CRW, alf weevil, PLH, soy aphid
- Supply staff with boxes containing major insect pests of field crops
- Research publications and other media from other states that may be useful to CCE staff
- Provide short segments on disease identification and life cycles on major field crops via video conferencing for staff development, the same for major and minor insect pests, updates on efficacy of products on pest control
- Ability to put pest images into a slide (Powerpoint) file.
- Recommended resources for a particular pest problem
- Come up with a control for *Equisetum arvense* in field crops.
- Review of cover cropping information
- Review of soil types
- Pictures of insects, disease and weeds are always great, thanks
- Organic field crops and lawn
- Less scientific description of common pests in crops grown in CNY and their damages
- Simple ideas for recording scouting practices in the field
- Again, for the moment, as the new kid on the block, you seem to have the bases very well covered. Looking forward to learning more about TAGs. Ask me again next year!
- Monthly IPM educational meetings.
- Bigger budget.
- Public awareness and education.

Summary:

Feedback from respondents indicated the NYS Field Crops Pest Report was overwhelmingly well received by Field Crops Extension Staff. In addition to immediate use by extension personnel, the Weekly Report also had a multiplier effect as a source of information used in array of educational methods. The most common method was to use specific pest information from the report in CCE county agricultural newsletters and reports. Many thousands of growers, crop consultants and agri-business people received part of this pest information through these county newsletters in NYS. For example – CCE Extension Educators in the Hudson Valley publish a combined agricultural newsletter for several counties. They used several of the articles we prepared on a regular basis. Many Extension Educators have used these articles in a similar fashion by reprinting many of them in their county agricultural newsletters. Many aspects of this report used in newsletters reached about 20,000 people on a regular basis this year. Some Extension Educators sent the pest report directly to growers, crop consultants and agri-business people via email. Some of these recipients of the pest report had positive comments on how they liked the report and how they were using the information. Many Extension Educators indicated they used the pest report in field visits and meetings. Some crop consultants stated they would use information directly with their clients. Some growers also stated that they found the pest report useful to their farming operation. Respondents overwhelmingly indicated they liked and appreciated the timely information for their extension programming.

Respondents had some suggestions on improving the report. One area that is suggested that in improve is providing organic options to pest situations that occur during the season. There are getting to be many more organic field crop producers in NYS.

A second suggestion is to keep the report shorter. Many of the articles were too long some of the respondents thought, while others want ready made articles for their newsletters. In the future we will

attempt to keep articles shorter and the report down to 3 or 4 pages. Extension Educators suggested a maximum length of 500 words per article to best fit into newsletters.

Currently the report only is sent to extension educators and a few other professional agriculturists. The thought behind this was to let the educators use the report information best suited to their situation. Most of the extension educators felt that we should send the report to a larger list-server to reach more people. We are going to send this report to the general field crops list-serve managed by Cornell University Crop and Soil Science Department next year. This list serve has extension educators, crop consultants, ag. business people, faculty and growers.