

# **Final Project Report to the NYS IPM Program, Community IPM 2000 – 2001**

**Title: Improving Diagnostic Skills through Regional Training Sessions and  
Web Site Improvement.**

**Project Leader(s): Karen L. Snover,  
Director, Plant Disease Diagnostic Clinic  
Cornell University  
334 Plant Science Bldg.  
Ithaca, NY 14853  
Phone: 607-255-7850, Fax: 607-255-4471, Email: kls13@cornell.edu**

**Cooperator(s): Jana Lamboy, IPM Program, Geneva, NY  
Paul Weston, Department of Entomology, Ithaca, NY  
Kristen Stewart, CCE Steuben  
Walter Nelson, CCE Chemung  
Amy Ivy, CCE Clinton/Essex  
Richard Gast, CCE Franklin  
Marilyn Smith & Debbie Coyle, CCE Montgomery/Fulton  
Joan Cybula & Jan van der Heide, CCE Oswego  
Chris Logue, CCE Schenectady  
David Chinery, CCE Rensselaer  
David Swaciak & Erica Fleischman, CCE Allegany/Cattaraugus**

**Type of grant: Implementation-Continuing  
-Training practitioners to use IPM techniques.  
-Public Education.**

**Project location(s): Regionally in New York State originating from the Ithaca campus.**

## **Abstract:**

**Any Integrated Pest Management (IPM) effort needs to stress the importance of proper, accurate pathogen and pest identification. Control method recommendations are often very specific depending on the organism causing the plant disease. An IPM approach to managing pathogens will only be successful if proper disease diagnosis is performed prior to taking any action to correct the situation. The Plant Disease Diagnostic Clinic at Cornell University has dedicated itself to providing the New York State community with plant disease diagnostic pathogen identification and education. To continue this mission and expand our audience, we implemented a plan to improve our interaction with consumers and professional horticulturists and to increase the awareness of plant diseases among residents of our community through regional training sessions.**

## **Background and justification:**

**When a plant disease or plant problem arises, consumers want to select the most appropriate method of control for their problem. Most consumers realize the value of mature plants while also being aware of environmental concerns regarding pesticide applications as a means of disease control. While pesticides can not be ruled out completely, often other control options are available but not as widely known. Educating consumers and members of Cooperative Extension on pathogen life cycles (which may dictate timing of management recommendations), on the broad scope of control measures available, and how to decide whether a management method is even necessary is our mission as an educational resource clinic. With the help of a Community IPM grant in 1999, we were able to conduct four regional training sessions that brought diagnostic skill development to approximately 350 participants. In 2000, we conducted three training sessions that affected approximately 200 people. The written comments collected after the training sessions suggested that the training was extremely useful and should be continued.**

**In March 1999 we released the new web page for the Plant Disease Diagnostic Clinic. The web page has counted over 6600 hits since that release date. We believe this resource of information on sample submission and educational fact sheets will be very helpful in making our services known and providing a site of quality plant disease educational information. Thanks to an IPM grant, we were able to improve and place 50-60 of our factsheets at the site.**

### **Objectives:**

- 1. Improve disease diagnostic skills of Cooperative Extension Educators, Master Gardeners, and community members by conducting regional educational workshops.**
- 2. Continue improving our web site and expand the fact sheet database.**
- 3. Offer pesticide applicator re-certification credits.**

### **Procedures:**

- 1. Improve disease diagnostic skills of Cooperative Extension Educators, Master Gardeners, and community members through conducting regional educational workshops. To fulfill the need for regional training sessions, three sites for continued training will be selected by determining, with the help of county extension educators, where the greatest need for such training exists and where the greatest impact may be obtained. The program effort will focus on how to approach a plant problem and development of diagnostic skills. Through a discussion of a systematic 5-step technique, the most likely cause of a plant problem will be determined by considering the normal characteristics of a plant species or cultivar, by asking critical questions, and by observing the pattern of damage in the landscape, on an individual plant, as well as on an individual plant part.**
- 2. Continue improving our web site and expand the fact sheet database. Expansion of the fact sheet database will involve the creation of at least 10 new fact sheets needed to make users of the web site aware of possible damaging agents. New and newly important diseases are presenting themselves at all times. Information on these problems need to be made available to the public and will be given priority when determine the subject matter for the**

new factsheets. Also, well-established disease information needs to be presented in a simple, direct format to aid community members with their plant disease problems.

**Results and discussion:**

The IPM Program and Carrie Koplinka-Loehr conducted a survey in 2000 to assess the diagnostic capabilities in the counties. This survey showed a need for more training in the area of diagnosing plant problems especially on ornamental plants. Jana Lamboy proposed developing a program that would address this need. Our goal was to provide useful information that will allow individuals to make a well-educated decision when first determining what has caused a problem and then what is the best method of management of the problem. A program was developed that included Snover’s teaching of “A Systematic Approach to Diagnosing Plant Problems” followed by Lamboy’s teaching of the “Role of Diagnosis is an IPM Program”. At two sites, Paul Weston added a presentation on common insect pests of ornamentals, for an increased entomology focus. The program ended with ample time for hands on diagnosis and identification of symptomatic plant material. County agent involvement allowed the participants access to numerous informative individuals from which questions on diseases, insect pests, predators, biological controls, non-infectious agents, plant characteristics, and equipment usage were presented. The individuals involved in the production of this training felt extremely proud and rewarded that the training program was a success. The program was presented at the following locations.

<u>Date:</u>	<u>Location:</u>	<u># of People:</u>	<u>Time Period:</u>	<u>Contact Hours:</u>
08/01/01	Steuben/Chemung	~25	10am-2pm	100
08/08/01	Saranac Lake	~45	8:30am-3pm	270
08/08/01	Fulton/Montgomery	~10	6pm-8pm	20
08/13/01	Oswego	~15	10am-2:30pm	60
08/16/01	Albany	~40	1pm-4:15pm	160
09/20/01	<u>Allegany/Cattaraugus</u>	<u>~40</u>	9am-12pm	<u>120</u>
Totals:	6 Locations	>175 people		730 Contact hours

The contact hours indicate the amount on time the information was presented to the number of individuals present. Therefore, 25 people at a 4-hour presentation, equals 100 contact hours. The figure is useful in our determination of the amount of interaction time with our audience.

The audience in each workshop included certified pesticide applicators such as school groundskeepers, landscapers, and greenhouse operators. A total of 34 professionals signed in for update credits in several categories (1a, 3a, 10, 23, and 25) depending on the site. These professionals often participated in discussions and helped during the hands-on portion of the program.

Two of the programs conducted evaluations. The surveys indicated that the participants felt the information presented was useful and helpful in their understanding of diagnostics, the topics were presented in an easy to understand manner, and the time allotted was good. Participants were asked about their knowledge of insects, diseases, the steps in diagnosing plant problems, and the role of diagnosis prior to and after the training. All categories showed great improvement due to the training sessions.

**The addition of new fact sheets at the Clinic's web site could not be included on this project due to the unfortunate removal of funding during the project year. This important piece of the project will not be done at this time but hopefully other funding may arise to help improve this important resource that will allow a very large Internet audience access to unbiased recommendations and disease descriptions.**