

Pest Management

Pest Management

V(A). Planned Program (Summary)

1. Name of the Planned Program

Pest Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
211	Insects, Mites, and Other Arthropods Affecting Plants			55%	
212	Pathogens and Nematodes Affecting Plants			15%	
215	Biological Control of Pests Affecting Plants			15%	
216	Integrated Pest Management Systems			15%	
Total				100%	

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	0.3	0.0
Actual	0.0	0.0	0.9	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	49112	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	49112	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	9088	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

There were two Pest Management projects in 2007. In the first, experiments were conducted to examine the role of hormones, juvenile hormone and several biogenic amine that circulate in hemolymph, on the reproductive behavior of several species of beetles. It is only with a good understanding of these mechanisms that good pest control methods can be developed. In addition to the experiments, two manuscripts were prepared and published and presentations were made at two regional meetings. The second project conducted experiments to test the olfactory responses of fungus gnats to different types of greenhouse growing media. In addition, an attempt was made to recover and identify a "new" parasite that has potential for biological control of fungus gnats. Finally, several trials were conducted to assess methods of inoculating greenhouse tomato plants with leaf mold (*Fulvia fulvum*) so that the effectiveness of treatment and prevention regimes could be studied. Results were shared with greenhouse growers through a number of growers meetings. A manuscript was prepared and published.

2. Brief description of the target audience

The target audience for the beetle project is primarily the scientific community although the ultimate application of the findings would be important producers of crops (field and forest) that are affected by beetles. The primary target audience for the fungus gnat and the leaf mold research is greenhouse producers in New England.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	50	50	0	0
2007	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	2	0

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

Peer Reviewed Publications

Year	Target	Actual
2007	3	2

Output #2**Output Measure**

Chapters in Books

Year	Target	Actual
2007	1	0

Output #3**Output Measure**

Non peer reviewed publications including abstracts

Year	Target	Actual
2007	1	1

Output #4**Output Measure**

Undergraduate students trained

Year	Target	Actual
2007	{No Data Entered}	1

Output #5**Output Measure**

Graduate Students trained

Year	Target	Actual
2007	{No Data Entered}	1

Output #6**Output Measure**

Presentations at regional, national and international symposia and workshops

Year	Target	Actual
2007	{No Data Entered}	11

Output #7**Output Measure**

Number of persons participating in the projects.

Year	Target	Actual
2007	{No Data Entered}	6

V(G). State Defined Outcomes

O No.	Outcome Name
1	Peer Reviewed Publications
2	Increase in knowledge

Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

Natural Disasters (drought, weather extremes, etc.)

Brief Explanation

Weather conditions prevented the researchers from effectively inoculating greenhouse tomato plants with leaf mold. Consequently it was not possible to study the effects of potential prevention methods.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

Before-After (before and after program)

During (during program)

Time series (multiple points before and after program)

Evaluation Results

For both projects, data was collected through the course of the experiments and analyzed statistically after completion.

Key Items of Evaluation