

Plant Protection

Plant Protection

V(A). Planned Program (Summary)

1. Name of the Planned Program

Plant Protection

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	25%			
212	Pathogens and Nematodes Affecting Plants	20%			
213	Weeds Affecting Plants	20%			
214	Vertebrates, Mollusks, and Other Pests Affecting Plants	5%			
216	Integrated Pest Management Systems	30%			
	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	10.0	0.0	0.0	0.0
Actual	11.5	0.0	0.0	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 365373	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching 182687	1890 Matching	1862 Matching	1890 Matching
	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

•PRAES agents trained farmers on pests of economical importance that affect the profitability of different crop commodities. These commodities were banana and plantain, herbs (coriander, cilantro), citrus, avocado and ornamentials. In banana and plantain, Extension agents educated and trained growers in evaluation of the incidence of Black Sigatoka in the field and the management practices available, focusing on IPM approach. •In forest health, Extension agents, agricultural educators, and personnel of the Department of Environmental and Natural Resources trained growers and other personnel related to forest managemtn in key pests in nurseries and urban forests, using as reference the manual and electronic presentation by the Entomology specialist, which were posted in <http://www.academic.uprm.edu/ofarrill>. •In herb production, Extension agents emphasized identification and management of key pests of cilantro ("Eryngium foetidum") and coriander ("Coriandrum sativum") in trainings and education offered to growers. •Seminars and radio programs growers were conducted by PRAES agents as part of an educational program to orient growers about management practices available for the control of pests and disease in crops of importance. •Demonstrations were conducted in hydroponic nurseries of producers to demonstrate the benefits of IPM practices and promote their adoption. •The citrus commodity emphasized the evaluation of IPM practices in nurseries to control the citrus leafminer and orientation to growers about key pests in citrus through the use of an educational guide developed by the IPM Specialist. The evaluation of the citrus leaf miner IPM practices in nurseries was delayed in 2007.

2. Brief description of the target audience

Pesticide applicators, homeowners, landscapers, farmers, personnel of the Department of Environmental and Natural Resources, agronomists of the Department of Agriculture.

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	9000	2000	0	0
2007	3768	7727	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	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Number of trainings offered on pesticide use and IPM program.

Year	Target	Actual
2007	200	1003

Output #2

Output Measure

Number of persons that completed a training program in integrated pest management in the crop commodities.

Year	Target	Actual
2007	400	3482

Output #3

Output Measure

Number of farmers that completed a training program on pesticide application.

Year	Target	Actual
2007	2000	2043

Output #4

Output Measure

Number of persons trained on commercial pesticide application.

Year	Target	Actual
2007	1300	2477

V(G). State Defined Outcomes

O No.	Outcome Name
1	Number of persons that acquired knowledge after completing a training program in integrated pest management.
2	Number of persons that adopted one or more techniques after completing an integrated pest management program.
3	Number of persons that reduced the use of pesticides after completing an integrated pest management program.
4	Number of persons that established IPM program after completing a training program.
5	Number of farmers that acquired knowledge after completing a training program in pesticide application.
6	Number of farmers that acquired knowledge after completing a training program in integrated pest management.

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

Government Regulations

Brief Explanation

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

1. Evaluation Studies Planned

Other (,)

Evaluation Results

Key Items of Evaluation