

# Plant Protection for the 21st Century

Plant Protection for the 21st Century

## V(A). Planned Program (Summary)

### 1. Name of the Planned Program

Plant Protection for the 21st Century

## 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	15%			
212	Pathogens and Nematodes Affecting Plants	15%			
213	Weeds Affecting Plants	15%			
214	Vertebrates, Mollusks, and Other Pests Affecting Plants	5%			
215	Biological Control of Pests Affecting Plants	10%			
216	Integrated Pest Management Systems	40%			
	<b>Total</b>	100%			

## V(C). Planned Program (Inputs)

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

Year: 2007	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	20.0	0.0	0.0	0.0
<b>Actual</b>	6.0	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 380399	1890 Extension	Hatch	Evans-Allen
	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	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**

Campus and regional faculty members will conduct several regional workshops and short courses in partnership with commodity groups and private industry. Venues include commodity district meetings, soil and crop conferences, Ag Science Week, regional short courses, field days and demonstration projects. A suite of full color print publications related to pest and crop management will be developed, published and revised. Several websites are available for public use. The integrated pest management site also contains interactive information for clientele interested in black cutworm status. Weekly teleconferences among state and regional faculty members will be held during spring, summer and autumn for timely commodity and pest updates. Funding will be provided to regional extension specialists for local demonstrations of integrated pest management practices.

**2. Brief description of the target audience**

The primary target audiences are crop producers and their advisers, and private and commercial pesticide applicators. Programs will be developed for crop producers with a diversity of farm sizes, crops produced, and land resource bases. Crop advisers and service providers are important targets because of their extensive contact with crop producers, which makes them ideal intermediates for passing on Extension programming to a wider range of producers than could be reached by Extension personnel alone. Because the future of Missouri agriculture depends on young professionals replacing retiring farmers and personnel, youth organizations including FFA, 4-H, Young Farmers, and their teachers will receive specially designed programs.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

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

	<b>Direct Contacts Adults</b>	<b>Indirect Contacts Adults</b>	<b>Direct Contacts Youth</b>	<b>Indirect Contacts Youth</b>
<b>Year</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>	<b>Target</b>
<b>Plan</b>	3000	5000	1000	0
2007	2700	5974	190	0

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

**Patent Applications Submitted**

<b>Year</b>	<b>Target</b>
<b>Plan:</b>	0
2007:	0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Plan</b>			
2007	0	0	0

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

Provide three in-service training sessions for regional Extension specialists on an annual basis.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	3	2

**Output #2**

**Output Measure**

Develop or revise 10 guide sheets on an annual basis for regional Extension specialists to use in producer meetings.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	10	9

**Output #3**

**Output Measure**

Develop or revise three manuals on an annual basis for regional Extension specialists to use in producer meetings.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	3	2

**Output #4**

**Output Measure**

Two print and electronic newsletters devoted to pest and crop management will be developed and distributed to regional specialists and other clientele.

<b>Year</b>	<b>Target</b>	<b>Actual</b>
2007	24	24

**V(G). State Defined Outcomes**

O No.	Outcome Name
1	Number of IPM educational materials (10 Guides & 3 Manuals) developed or revised either on paper or electronically (source = internal).
2	Number of IPM strategies and systems validated (source = internal).
3	Diversity of IPM practices adopted, including fields scouted for weeds, insects and pathogens (source = USDA/ERS).
4	Acres treated with insecticides, herbicides and fungicides with emphasis on high risk pesticides (source = USDA/ERS)
5	Three thousand (3,000) pesticide applicators will meet the legal need of certification by improving their knowledge of pesticides and their use.
6	Two thousand (2,000) agricultural producers, turfgrass and ornamental professionals and agribusiness personnel will acquire knowledge and skills to aid in the successful adoption and implementation of existing integrated pest management practices.

**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.)

Economy

Appropriations changes

Public Policy changes

Government Regulations

Competing Programmatic Challenges

**Brief Explanation**

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

**1. Evaluation Studies Planned**

After Only (post program)

Before-After (before and after program)

During (during program)

**Evaluation Results**

**Key Items of Evaluation**