

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Plant and Environmental Systems

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships				10%
103	Management of Saline and Sodic Soils and Salinity				10%
104	Protect Soil from Harmful Effects of Natural Elements				10%
112	Watershed Protection and Management				10%
131	Alternative Uses of Land				10%
132	Weather and Climate				10%
133	Pollution Prevention and Mitigation				10%
201	Plant Genome, Genetics, and Genetic Mechanisms				10%
202	Plant Genetic Resources				10%
206	Basic Plant Biology				10%
	Total				100%

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	0.0	17.3
Actual	0.0	0.0	0.0	8.6

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	0	935361
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	58670
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

1. Newsletters.
2. Publications (journals, articles).
3. Abstracts.
4. Presentations (scientific conferences, workshops, seminars).
5. digital media (video, MP3 JPEG, GIFF) of project work.
6. Audio (recordings, radio, TV excerpts).

2. Brief description of the target audience

One-on-one interaction in field and lab project areas will highlight the research efforts. Extension is the end product of the integrated work within the research, teaching, and extension model.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	120	300	40	250
Actual	150	250	100	200

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

Patent Applications Submitted

Year: 2010
 Plan: 1
 Actual: 2

Patents listed

Cuero, Raul. Versatile antimicrobial agent TAMUS-2316. US Serial No. 12/288,818. 2009.
 Cuero, Raul. A UV Blocker molecule. US Serial No. 61/143,995. 2009.

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	10	
Actual	0	6	6

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Increase peer-review publications, presentations, abstracts, and competitive grants. Increase graduate student enrollment and matriculation in the program. We anticipate a 5% increase over the previous 5 year base line in each of these categories.

Year	Target	Actual
2010	10	6

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	-Research results highly valued by stakeholders -Increased recognition of the program - Increased interest in the program by students wishing to matriculate in the program - Enhanced attraction of external funding

Outcome #1

1. Outcome Measures

-Research results highly valued by stakeholders -Increased recognition of the program -Increased interest in the program by students wishing to matriculate in the program -Enhanced attraction of external funding

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Environmental interest groups including the USDA, the Texas Department of Agriculture and Texas Parks & Wildlife.

What has been done

Wetlands delinations, new techniques of biocontrol and new systems of bioremediations.

Results

Better understanding of ecosystem interactions.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
103	Management of Saline and Sodic Soils and Salinity
104	Protect Soil from Harmful Effects of Natural Elements
112	Watershed Protection and Management
131	Alternative Uses of Land
132	Weather and Climate
133	Pollution Prevention and Mitigation
201	Plant Genome, Genetics, and Genetic Mechanisms
202	Plant Genetic Resources

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 Public priorities
- Competing Programmatic Challenges

Brief Explanation

Changing climatic factors combined with changing demographics leading to increasing competing uses of the land. The emerging rural urban interface increases the need for relevant outcomes. However, competing needs for internal resources hampers the ability to address all competing needs in a timely manner. More effective planning and enhanced resource capacity will ensure better results in future activities.

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

1. Evaluation Studies Planned

- Retrospective (post program)
- During (during program)

Evaluation Results

Evaluation results indicate program relevancy.

Key Items of Evaluation

The plant and environmental systems focus group is currently working on a number of relevant plant and environmental quality issues. However, resource constraints, primarily human capital, have limited the outcome at this point. Projections, however, for the future include the addition of new staff that will enhance the human capital capacity of the group. This will increase the ability of the group to accelerate the process of achieving results desired.