V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Plant Germplasm Conservation and Enhancement

☑ Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
202	Plant Genetic Resources			80%	
205	Plant Management Systems			20%	
	Total			100%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	1.0	0.0
Actual Paid Professional	0.0	0.0	1.0	0.0
Actual Volunteer	0.0	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	**1890 Extension**	**Hatch**	**Evans-Allen**
0	0	59300	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
0	0	29207	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

- Conduct research projects
- Sell papaya seeds to local farmers
- Prepare information sheet on sweet potato
- Distribute sorrel seed
- Present data at conferences
- Develop fact sheets for local growers
- Publish results in scientific journals

2. Brief description of the target audience

The target audiences are the local crop farmers and back yard growers. These producers normally have less than two acres under production. The Virgin Islands has only three producers with total production acreage over two acres.

3. How was eXtension used?

eXtension was not used in this program

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	0	0	0	0

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

Patent Applications Submitted

Year: 2012

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2012	Extension	Research	Total
Actual	0	1	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of publications

Year	Actual
2012	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of local farmers growing selected plant varieties

Outcome #1

1. Outcome Measures

Number of local farmers growing selected plant varieties

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Local farmers and consumers have increased expectations for locally grown quality produce. Due to economic situation of the islands, an increased focus by local people to grow their own and want information and planting material to fulfill the need.

What has been done
Sweet potato varieties were screened for weevil resistance. Weevil traps were installed in research plots to monitor weevil populations. Fifteen sweet potato varieties from the USDA germplasm collection were evaluated for date to maturity, weevil tolerance and tuberous root quality. A workshop was also conducted to show growers the new sweet potatoes being evaluated.
Sorrel was grown on five local farmer plots and at the university to evaluate germplasm on-farm. Data was collected and plant growth habit, production and quality of fruit recorded.

Results
Weevil populations increase during the first four weeks of sweet potato production and then stabilize at a high population through harvest. Four varieties were found to be either very weevil susceptible and/or have poor quality tuberous root production. Virus-free material had stronger vigorous growth and increased production. A taste panel was used to evaluate the preference for the new sweet potato varieties. Special interest was for the purple-colored flesh variety both for novelty and nutritional properties.
Sorrel production has been completely changed in the Virgin Islands as a result of the introduction of day neutral darker red varieties. Old traditional small fruited red varieties have been replaced over the past four years with varieties that extend the production season and have larger high quality fruit. The sorrel production season has increased from two month to eight month with the introduction and use of new sorrel varieties.

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes

Brief Explanation

V(I). Planned Program (Evaluation Studies)

Evaluation Results

None

Key Items of Evaluation

None