Plant Production

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Plant Production

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources			8%	
102	Soil, Plant, Water, Nutrient Relationships			23%	
201	Plant Genome, Genetics, and Genetic Mechanisms			7%	
202	Plant Genetic Resources			17%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants			7%	
204	Plant Product Quality and Utility (Preharvest)			7%	
205	Plant Management Systems			17%	
206	Basic Plant Biology			10%	
211	Insects, Mites, and Other Arthropods Affecting Plants			1%	
212	Pathogens and Nematodes Affecting Plants			2%	
511	New and Improved Non-Food Products and Processes			1%	
	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	5.0	0.0
Actual	0.0	0.0	6.6	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 0	1890 Extension 0	Hatch 292954	Evans-Allen 0
1862 Matching 0	1890 Matching 0	1862 Matching 1118797	1890 Matching 0
1862 All Other 0	1890 All Other 0	1862 All Other 587027	1890 All Other 0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Research new ways to increase the productivity of potato, blueberry, apple, small fruit and vegetable crops. Develop and test new potato, other vegetable, and horticultural plant varieties.Conduct research on basic plant biology and molecular biology issues. Research new soil management and cover crop techniques to increase yields and improve soil quality. Research basic soil chemistry issues. Publish peer-reviewed journal articles and other publications concerning research. Present findings at professional meetings, at field days for growers, and at other venues.

2. Brief description of the target audience

Plant geneticists, biologists, and molecular biologists, soil scientists, extension specialists, plant breeders, Maine's horticultural industry, Maine fruit and vegetable producers, greens managers

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	0	0	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	19	19

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

# of field days/research tours

Year	Target	Actual
2007	5	7

Output #2

Output Measure

# of research projects completed

Year	Target	Actual
2007	5	6

Output #3

Output Measure

# of papers presented at professional meetings

Year	Target	Actual
2007	26	38

Output #4

Output Measure

# of peer-reviewed publications

Year	Target	Actual
2007	10	19

Output #5

Output Measure

# of other types of publications

Year	Target	Actual
2007	8	33

V(G). State Defined Outcomes

O No.	Outcome Name
1	# of improved analytical methods developed to study dissolved organic matter in soils
2	# of candidate stress-related genes or alleles that are functionally characterized
3	% of Maine apple growers who increase their knowledge about most suitable rootstocks for Maine conditions
4	# of gene-based marker systems used for targeted introgression in potato-variety-improvement program
5	# of new potato varieties released from Eastern potato-breeding program
6	# of potato clones with the best characteristics that will be selected annually for commercial-scale testing on experiment station and commercial farms
7	% of Maine potato growers adopting new recommendations (i.e., fertility programs, tissue-testing tools, crop rotation recommendations)
8	# of new, resistant Poa annua clones
9	% of Maine apple growers planting winter-hardy, early-bearing rootstocks
10	# of small Maine farms that will diversify
11	# of Maine farmers implementing sustainable agricultural practices
12	# of Maine farms developing new agricultural products
13	# of new potato varieties adopted by Maine potato farmers
14	% decrease in blueberry leaf samples showing nutrient deficiencies
15	% increase in productivity of blueberry fields (lbs/acre) through better fertility management
16	Increase in profitability for Maine apple industry from a quicker return on investment and reduction in catastrophic tree losses ($)
17	New propagation methods for Rhododendron carolinianum.
18	New, water-saving irrigation system for commercial greenhouse growers

Plant Production
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

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area

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
Populations changes (immigration,new cultural groupings,etc.)
Other (new pest/disease species)

Brief Explanation

{No Data Entered}

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

1. Evaluation Studies Planned

After Only (post program)
During (during program)
Comparison between locales where the program operates and sites without program intervention

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}