Plant Breeding, Genetics, Biotechnology and Crop Quality

Plant Breeding, Genetics, Biotechnology and Crop Quality

V(A). Planned Program (Summary)

1. Name of the Planned Program

Plant Breeding, Genetics, Biotechnology and Crop Quality

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
201	Plant Genome, Genetics, and Genetic Mechanisms	20%		20%	
202	Plant Genetic Resources	10%		10%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	15%		15%	
204	Plant Product Quality and Utility (Preharvest)	30%		30%	
212	Pathogens and Nematodes Affecting Plants	15%		15%	
213	Weeds Affecting Plants	10%		10%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

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

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	0.8	0.0	12.5	0.0
Actual	1.0	0.0	7.7	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 454969	Evans-Allen 0
1862 Matching 0	1890 Matching 0	1862 Matching 3341778	1890 Matching 0
1862 All Other 0	1890 All Other 0	1862 All Other 480403	1890 All Other 0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Conduct Research Experiments.
- Conduct Workshops, meetings.
- Deliver Services.
- Develop Products, Curriculum, Resources.
- Provide Training.
- Assessments.
- Partnering.
- Facilitating.

2. Brief description of the target audience

Professional peers and scientific communities
State commodity commissions and grower groups
Natural resource industry clientele – growers, field representatives, grower coops and partnerships, processors and handlers, export companies, importing companies
State and federal agencies – Oregon Department of Agriculture, Natural Resource Conservation Service
Undergraduate and graduate students

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
2008	0	0	0	0

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

Patent Applications Submitted

Year	**Target**
Plan:	0
2008:	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	**Research**	**Total**
Plan	0	15	
2008	0	21	21

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

SCHOLARLY excellence in referred articles, book chapters, and books; participation on professional boards and panels, as well as science panels.

Year	Target	Actual
2008	21	56

Output #2

Output Measure

DEVELOP BREEDING PROGRAMS THAT RESULT IN DESIRABLE TRAITS, CULTIVARS AND VARIETIES - breeding programs for barley, meadowfoam, potato, wheat - crop quality work include studies on malt barleys, super soft white wheats, modified wheat starches and proteins, modified potato starches and proteins, assessment of oil quality and quantity in meadowfoam and of glucosinolates in meadowfoam meal.

Year	Target	Actual
2008	1	19

Output #3

Output Measure

CARRY OUT STUDIES TO DECIPHER GENOMES, GENETICS AND MECHANISMS OF PLANTS AND ANIMALS - characterize genetic diversity in economically important crop plants, - identify novel genes, and - carry out molecular breeding in adapted germplasm

Year	Target	Actual
2008	2	20

Output #4

Output Measure

DEVELOP BETTER UNDERSTANDING OF BASIC PHYSIOLOGY OF PLANTS AND ANIMALS - understand responses to environmental signals, growth and development pathways

Year	Target	Actual
2008	0	6

Output #5

Output Measure

PROVIDE ADDITIONAL UNDERSTANDING FOR PLANT AND ANIMAL PROTECTION FROM DISEASES AND PESTS - understand responses to attack by other organisms

Year	Target	Actual
2008	1	7

V(G). State Defined Outcomes

O No.	Outcome Name
1	• Understand pollen flow mechanisms between wheat and its wild relative jointed goatgrass • Varieties released (with Plant Variety Protection coverage) for general public and/or licensed release • new research methods and discoveries will be published
2	With the knowlege produced, released varieties will be adopted by growers; new research methods will be adopted by the research community
3	In the long run, • Higher-value niche markets will be established for program-developed crops; • Increased opportunities for rural community marketers and processors will be developed; • Public health will be improved through the use of crops with improved nutritional value

Plant Breeding, Genetics, Biotechnology and Crop Quality
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.)

Brief Explanation

{No Data Entered}

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

1. Evaluation Studies Planned

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}