

Other Idaho Commercial Crops

Other Idaho Commercial Crops

V(A). Planned Program (Summary)

1. Name of the Planned Program

Other Idaho Commercial Crops

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water	10%		10%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	0%		5%	
204	Plant Product Quality and Utility (Preharvest)	10%		10%	
205	Plant Management Systems	15%		10%	
211	Insects, Mites, and Other Arthropods Affecting Plants	5%		5%	
212	Pathogens and Nematodes Affecting Plants	5%		5%	
214	Vertebrates, Mollusks, and Other Pests Affecting Plants	0%		5%	
215	Biological Control of Pests Affecting Plants	10%		10%	
216	Integrated Pest Management Systems	40%		10%	
403	Waste Disposal, Recycling, and Reuse	0%		10%	
404	Instrumentation and Control Systems	5%		5%	
511	New and Improved Non-Food Products and Processes	0%		5%	
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	0%		5%	
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	0%		5%	
Total		100%		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	2.7	0.0	5.3	0.0
Actual	5.5	0.0	10.3	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 98945	1890 Extension 0	Hatch 480197	Evans-Allen 0
1862 Matching 98945	1890 Matching 0	1862 Matching 480197	1890 Matching 0
1862 All Other 193432	1890 All Other 0	1862 All Other 2457790	1890 All Other 0

V(D). Planned Program (Activity)**1. Brief description of the Activity**

Program activities for the Other Idaho Commercial Crops topic team were delivered to 1328 teaching contacts. Other Idaho Commercial Crops topic team projects included: 1) Idaho alfalfa seed industry website, 2) onion disease management, 3) pest management strategic plans and crop profiles, 4) plant disease identification and management in southern Idaho, and 5) Treasure Valley Pest Alert Network. Activities included field and laboratory research, demonstration projects, workshops, field tours, and professional presentations offered in a total of 16 events.

The alfalfa seed website continues to be a repository of timely research based information related to the Idaho alfalfa seed industry. Idaho is the second largest alfalfa seed producing state behind California and is the leading producer of dormant alfalfa seed. Additional funding support was received in 2007 to continue the process of uploading information to the website.

Topic team activities related to onion disease management included field studies to devise better management strategies for the two major onion diseases, neck rot and Iris yellow spot virus (IYSV), thereby improving the yield, reduction of cost of production, and higher economic returns to onion growers and shippers. Three peer reviewed publications related to onion diseases were published in 2007.

Activities related to pest management strategies and crop profiles included meetings with fruit grower stakeholders, updates to growers on new spray techniques, organic materials, and water conservation, distribution of a fruit grower newsletter, and networking with chemical companies and SW Idaho Horticulture Association to get information to the growers.

The topic team provided disease diagnostic and disease management guidance to a broad range of clientele including county extension educators, fieldmen, master gardeners, consultants, nurserymen, cooperatives, industry personnel, farmers, and home-owners. Extension specialists have processed about 260 plant samples submitted for diagnosis, which included field crops, fruit crops, nursery, greenhouse, landscape and home garden plants, and lawn samples.

The Treasure Valley Pest Alert Network, a website designed to increase communication and provide timely pest outbreak information to growers and field representatives, delivered a total of 41 alerts concerning pest and disease outbreaks and 16 alerts concerning classes or meetings. The website also delivered research based pest control information to growers. Growers are using the pest alerts to protect pollinators, protect fruit, and time sprays better to reduce chemical residues in the environment. A publication entitled: "Rapid Delivery of Regional Pest Alerts Using an Interactive Internet Site" was published in the Journal of Extension.

2. Brief description of the target audience

The largest numbers reached include farmers and ranchers from Idaho seeking pesticide applicator certification. Other audiences include aerial applicators, growers of minor crops in Idaho and western U.S., EPA, USDA, ISDA and other western departments of agriculture, regional land grant institutions, public interest groups, crop advisers and farm workers throughout Idaho and in adjacent states. Research was focused toward results based on input and funding from various sources such as the Idaho Bean Commission, the Idaho Oilseed Commission, and the US Dry Pea and Lentil Council.

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	6230	55125	0	0
2007	4353	0	136	0

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

Patent Applications Submitted

Year Target

Plan: 1

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	9	20	29

V(F). State Defined Outputs**Output Target****Output #1****Output Measure**

Professional invited presentations.

Year	Target	Actual
2007	39	19

Output #2**Output Measure**

Professional submitted presentations.

Year	Target	Actual
2007	93	3

Output #3**Output Measure**

Workshops, field tours, demonstration projects and presentations.

Year	Target	Actual
2007	259	91

Output #4**Output Measure**

Extension Publications.

Year	Target	Actual
2007	161	6

Output #5**Output Measure**

Professional Publications.

Year	Target	Actual
2007	52	10

Output #6**Output Measure**

Applied and basic laboratory and field research experiments.

Year	Target	Actual
2007	89	19

Output #7**Output Measure**

Refereed journal articles

Year	Target	Actual
2007	1	29

V(G). State Defined Outcomes

O No.	Outcome Name
1	O: Increased industry knowledge about the production practices necessary to insure environmental and economic sustainability. I: Increased knowledge of clientele, number of website visits.
2	O: Growers adopting practices utilized and taught. I: Number of website visits; survey data; clientele
3	O: Improved water quality in ground and surface water bodies. I: Changes in water quality data over time (e.g. pesticides, pests).
4	O: An increase in the number of trained graduate students prepared to enter the workforce. I: Number of M.S. and Ph.D. candidates relevant to this topic team.

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

Other (none)

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)

Evaluation Results

Modifications and adjustments made to spray equipment on 35 aircraft participating in the "fly-in" will improve the delivery of pesticides on aircraft tested, will reduce spray drift or off target application, will increase the efficacy of the product, and will reduce the amount of product applied on approximately 6 million acres annually.

Approximately 300 individual learners performed sufficiently to become certified as pesticide applicators during 2007; hundreds more received continuing education that allows them to maintain their applicator's certification.

As a result of information received from TV/PNWPestAlert.net in 2006, 17 percent of website subscribers reduced the number of sprays applied to their crops, 30 percent said their spray applications were more effective because they received timely information they could use to help them make pest management decisions, and 35 percent of website subscribers reported they have increased their use of field scouting to document pest levels before implementing control measures. The 2004 through 2006 surveys indicates that as a result of information received from TV/PNWPestAlert.net, website subscribers are using on average 9.3 percent less chemical on their crops than they were before they used the pest alert network. If this decrease in chemical usage was applied to only potato production across all of Idaho it would mean a savings to growers of nearly 12.0 million dollars and an additional benefit to the environment.

Key Items of Evaluation