

Crop Enterprises

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Crop Enterprises

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	33%		6%	
133	Pollution Prevention and Mitigation	4%		4%	
201	Plant Genome, Genetics, and Genetic Mechanisms	2%		10%	
204	Plant Product Quality and Utility (Preharvest)	7%		11%	
205	Plant Management Systems	37%		12%	
211	Insects, Mites, and Other Arthropods Affecting Plants	6%		18%	
212	Pathogens and Nematodes Affecting Plants	1%		5%	
213	Weeds Affecting Plants	7%		15%	
215	Biological Control of Pests Affecting Plants	1%		4%	
216	Integrated Pest Management Systems	2%		15%	
	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	11.3	0.0	6.0	0.0
Actual	20.5	0.0	13.5	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 451080	1890 Extension	Hatch	Evans-Allen
	0	736000	0
1862 Matching 451080	1890 Matching	1862 Matching	1890 Matching
	0	736000	0
1862 All Other 1580000	1890 All Other	1862 All Other	1890 All Other
	0	3424000	0

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

Wheat variety development and testing
 Developed a no-till production manual
 Wheat quality and product development and testing
 Wheat management newsletter, website
 Tested and demonstrated alternative cropping systems and rotations
 Improved web-based delivery of cropping systems information
 Weekly crop updates during production season
 Grower meetings/workshops
 Field/demonstration days
 No-till conference

2. Brief description of the target audience

Wheat growers, dual-purpose wheat producers, millers, bakers, wheat importers, seed growers and dealers, wheat breeders, crop producers, potential cotton, canola, peanut, and other crop producers and nutraceutical producers.

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	1500	2500	0	0
2007	122240	4449116	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	13	10	23

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Field Demonstrations

Year	Target	Actual
2007	30	26

Output #2

Output Measure

Varieties of wheat released

Year	Target	Actual
2007	1	0

Output #3

Output Measure

Crop production manuals and production newsletters

Year	Target	Actual
2007	14	15

Output #4

Output Measure

Cotton weekly crop updates

Year	Target	Actual
2007	10	13

Output #5

Output Measure

Cotton Web Page

Year	Target	Actual
2007	1	2

V(G). State Defined Outcomes

O No.	Outcome Name
1	Percentage of dual-purpose wheat acreage where first hollow stem criterion used for decision making
2	Increase in cotton production in eastern and central Oklahoma
3	Change in acreages that have crop rotations involving wheat
4	Change in fertilization and pesticide inputs due to diversified systems
5	Number of acres where minimum or no-till production practices are applied
6	Number of varieties accepted by seed producers and producers to address end-use quality issues
7	Provide locally-controlled evaluations and agronomic data for commercially released wheat cultivars and advanced experimental breeding lines
8	Characterize the nutritional and health benefits of widely-grown, commercially-available hard red and hard white winter wheat varieties.
9	Provide nutrient management strategies to wheat producers through intensive soil sampling and educational meetings

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
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

Natural Disasters (drought, weather extremes, etc.)

Brief Explanation

- The spring of 2007 was among the wettest on record in the state of Oklahoma. As a result many wheat experiments were lost due to flooding and waterlogged field conditions. In addition a mid-April freeze event eliminated >95% of the wheat crop in eastern OK and caused severe lodging to at least 500,000 acres in north-central OK.

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

1. Evaluation Studies Planned

Before-After (before and after program)

During (during program)

Evaluation Results

Technology Partnership Practice of the Battelle Memorial Institute was commissioned in 2007 to review and investigate economic impacts of DASNR programs. In that process the following three case studies were highlighted by the Battelle study.

Selected impacts on Oklahoma Wheat Industry

DASNR research and extension increased productivity and profitability in multiple ways:

- Planting and stocking rate efficiencies for dual-use wheat = \$121 million
- Grazing termination and optimization = \$42 million
- OK Green Gold supplementation = \$11 million
- 20% estimated productivity improvement for DASNR-developed winter wheat varieties = \$220 million in output (\$120 million value-added, \$20 million in labor income, 4,400 jobs)

Key Items of Evaluation