

## 2011 Collaborative On-Farm Tests (COFT) Results

The objective of the 2011 COFT was to compare performance and adaptability of popular and newly released CSU varieties (Snowmass, Hatcher, Ripper, and Bill Brown), and promising commercial varieties from WestBred (Winterhawk) and Watley Seed (TAM 112) under unbiased, commercial-scale testing conditions. The COFT program is in its 13th year and much of Colorado's 2011 wheat acreage was planted to winter wheat varieties that have been tested in the COFT program. In the fall of 2010, twenty-three eastern Colorado wheat producers planted COFT trials in Baca, Prowers, Kiowa, Cheyenne, Kit Carson, Washington, Yuma, Phillips, Bent, Logan, Adams, and Weld counties. Each collaborator planted six varieties in side-by-side strips (approximately 1.25 acres per variety) at the same time and at the same seeding rate as they seeded their own wheat. Despite the difficult 2010-2011 growing conditions, viable harvest results were obtained from 20 of the 23 tests.

The COFT trial results need to be interpreted based on the average across all tests within a year and not on the basis of a single variety comparison on a single farm in one year.

### **Eastern Colorado Extension Wheat Educators**

Bruce Bosley - Extension Agronomist, Logan County, 508 South 10th Avenue, Suite 1, Sterling, CO 80751-3408, phone: 970-522-3200, fax: 970-522-7856, e-mail: d.bruce.bosley@colostate.edu.

Dr. Wilma Trujillo – Extension Agronomist, Prowers County, 1001 South Main, Maxwell Annex Building, Lamar, CO 81052, phone: 719-336-7734, fax: 719-336-2985, e-mail: wilma.trujillo@colostate.edu.

Alan Helm - Extension Agronomist, Phillips County, 127 E. Denver, PO Box 328, Holyoke, CO 80734-0328, phone: 970-854-3616, fax: 970-854-4347, e-mail: alan.helm@colostate.edu.

Ron Meyer – Extension Agronomist, Golden Plains Area, 251 16th Street, Suite 101, Burlington, CO 80807-1674, phone: (719) 346-5571, fax: (719) 346-5660, e-mail: rf.meyer@colostate.edu.

2011 Collaborative On-Farm Tests (COFT) Variety Performance Results

2011 Varieties<sup>a</sup>

County/Town	Bill Brown			Hatcher			Winterhawk			Snowmass			Ripper			TAM 112			COFT Average		
	Test			Test			Test			Test			Test			Test					
	Yield <sup>b</sup>	Weight	Protein <sup>d</sup>	Yield <sup>b</sup>	Weight	Protein <sup>d</sup>	Yield <sup>b</sup>	Weight	Protein <sup>d</sup>	Yield <sup>b</sup>	Weight	Protein <sup>d</sup>	Yield <sup>b</sup>	Weight	Protein <sup>d</sup>	Yield <sup>b</sup>	Weight	Protein <sup>d</sup>	Yield <sup>b</sup>	Weight	Protein <sup>d</sup>
Adams/Bennett	48.0	61.0	9.3	45.4	59.5	10.4	49.4	62.0	9.4	38.7	60.5	9.9	40.5	59.5	10.4	39.5	62.0	10.4	43.6	60.8	10.0
Baca/Vilas	18.0	60.0	12.6	17.5	61.5	12.3	19.8	61.5	12.0	15.4	57.0	13.6	20.6	61.0	12.7	18.4	60.5	14.1	18.3	60.3	12.9
Baca/Walsh	26.4	61.0	-	26.3	61.0	-	24.3	62.0	-	26.0	62.0	-	28.3	61.0	-	23.5	61.0	-	25.8	61.3	-
Bent/Lamar	23.6	60.5	12.1	25.6	60.5	12.4	20.7	58.0	12.4	24.0	60.0	12.3	27.6	59.0	12.1	22.2	59.0	13.4	23.9	59.5	12.5
Cheyenne/Arapahoe	24.7	59.3	-	24.2	59.5	13.7	20.3	59.5	13.7	24.0	59.5	14.3	25.3	59.0	14.0	19.2	60.0	14.0	23.0	59.5	13.9
Cheyenne/Cheyenne Wells	68.6	59.0	9.6	58.8	62.5	10.0	58.3	61.5	10.7	58.4	62.0	11.0	58.8	60.5	10.6	63.1	60.0	11.3	61.0	60.9	10.5
Kit Carson/Bethune	52.8	61.7	12.7	45.0	60.2	12.3	47.1	60.2	12.5	50.0	59.7	12.4	46.0	59.5	-	40.1	59.7	12.9	46.8	60.2	12.5
Kit Carson/Stratton	88.4	60.5	11.4	84.4	57.5	-	76.0	55.7	11.0	87.0	59.2	12.1	87.1	59.4	12.0	84.1	59.7	12.5	84.5	58.7	11.8
Logan/Leroy	66.6	61.5	9.4	67.4	60.5	10.0	62.8	62.0	10.0	65.9	61.5	10.1	63.8	60.5	10.6	63.3	62.0	9.9	65.0	61.3	10.0
Logan/Peetz	18.7	60.0	12.6	21.5	59.0	12.5	17.1	60.0	12.8	17.0	59.0	12.5	13.9	56.0	14.6	14.6	60.0	13.5	17.1	59.0	13.1
Logan/Sterling W	48.7	59.0	12.2	52.3	58.0	12.0	46.0	60.0	12.8	45.8	58.6	12.0	48.0	56.5	12.3	44.2	58.5	12.9	47.5	58.4	12.4
Phillips/Haxtun	71.0	59.0	10.5	77.2	60.0	9.8	80.5	60.0	10.4	80.5	60.0	11.8	71.0	58.0	11.1	80.5	60.0	10.4	76.8	59.5	10.7
Prowers/Lamar	23.9	59.0	12.1	28.8	62.5	12.0	17.9	61.5	13.3	25.6	62.0	12.3	24.5	60.5	12.8	23.0	60.0	13.7	23.9	60.9	12.7
Washington/Akron E	60.1	56.5	13.7	60.2	56.0	13.3	55.7	58.0	13.3	56.4	56.0	10.4	58.6	57.5	14.4	63.0	57.5	13.9	59.0	56.9	13.2
Washington/Woodlin	65.6	60.5	10.2	59.5	60.5	10.8	60.7	62.0	10.4	56.1	62.5	10.5	55.3	61.0	11.1	60.1	62.5	10.5	59.5	61.5	10.6
Weld/Keenesburg	64.8	58.5	12.5	69.5	58.5	12.4	58.7	60.0	13.1	49.8	58.5	13.1	54.7	58.5	13.0	58.0	59.0	14.1	59.3	58.8	13.0
Weld/New Raymer	33.3	57.5	11.8	31.6	57.0	11.7	28.3	57.5	12.0	31.4	55.5	11.6	33.3	55.5	11.8	29.5	58.0	12.6	31.2	56.8	11.9
Weld/Prospect Valley	48.5	57.0	13.0	47.8	55.5	12.4	43.7	57.0	12.5	40.9	56.0	13.3	42.0	56.0	13.8	42.7	57.0	13.8	44.3	56.4	13.2
Yuma/Wray	59.6	54.0	11.2	66.2	56.3	-	76.1	59.0	9.9	65.9	58.0	10.3	55.1	54.0	11.7	62.1	57.0	11.3	64.2	56.4	10.9
Yuma/Yuma	30.6	60.0	10.0	30.4	60.0	10.2	31.0	60.0	10.0	31.6	59.0	10.7	31.6	60.0	10.5	26.1	60.0	10.6	30.2	59.8	10.3
Average	47.1	59.3		47.0	59.3		44.7	59.9		44.5	59.3		44.3	58.6		43.9	59.7		45.2	59.3	

Significance<sup>c</sup> Yield

LSD<sub>(0.30)</sub> for yield = 1.2 bu/ac

<sup>a</sup>Varieties are ranked left to right by highest average yield

<sup>b</sup>Yield corrected to 12% moisture

<sup>c</sup>Significance: Varieties with different letters are significantly different from one another based on the LSD values (1.2 bu/ac for yield)

<sup>d</sup>A different apparatus was used to determine protein content in locations north and south of I-70. Northern locations were analyzed by the Wheat Improvement Program in Ft. Collins, CO and the southern locations were analyzed at a grain elevator in Lamar, CO. Protein content from northern locations cannot be compared to those in the southern locations and vice versa.

Variety Summary of 2011 Collaborative On-Farm Tests (COFT)  
 Variety Summary of 2011 Collaborative On-Farm Tests (COFT)

Variety <sup>b</sup>	2011 Overall (20) <sup>a</sup>		Locations North and South of I-70	
	Yield <sup>c,d</sup> bu/ac	Test Weight lb/bu	North (14) <sup>a</sup>	South (6) <sup>a</sup>
			Protein <sup>e</sup> percent	
Bill Brown	47.1 A	59.3 A B	11.5	11.6 A B
Hatcher	47.0 A	59.3 A B	11.5	12.1 A B
Winterhawk	44.7 B	59.9 A	11.6	12.4 A
Snowmass	44.5 B	59.3 A B	11.5	12.7 A
Ripper	44.3 B	58.6 B	12.1	12.4 A
TAM 112	43.9 B	59.7 A	12.2	13.3 A
LSD <sub>(0.30)</sub>	1.2	1.0	NS	1.1

<sup>a</sup>Number of locations used

<sup>b</sup>Varieties are ranked by highest average yield overall

<sup>c</sup>Yield corrected to 12% moisture

<sup>d</sup>Significance: Varieties with different letters are significantly different from one another based on the LSD values

<sup>e</sup>A different apparatus was used to determine protein content in the northern locations than the southern locations. Northern locations were analyzed by the Wheat Improvement Program in Ft. Collins, CO and the southern locations were analyzed at a grain elevator in Lamar, CO.