PROJECT TITLE: Off-station spring wheat variety evaluations in eastern Montana – 2011 (4W2756)

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Personnel:

Site/County	Producer	CES Agent
Flaxville, Daniels	Jeff Mohn	Nicole Winkler
Circle, McCone	Victor Wagner	Ken Nelson
Poplar, Roosevelt	Mark Swank	Ann Ronning
Nashua, Valley	Bill Lauckner	Shelley Mills
Wibaux, Wibaux	David Maus	Dave Bertelsen

The Wibaux site was not planted because of flooding. The Flaxville site was not harvested because of poor stand.

OBJECTIVE: To evaluate varieties of spring wheat under dryland conditions at various sites in eastern Montana.

RESULTS: Summaries of yields, test weights, protein contents, and heights across all sites are shown in Tables 1-4. Vida yielded most across sites (Table 1). Volt had greatest test weight across sites (Table 2). Kelby had the highest protein content across sites (Table 3). Mott was tallest across sites and Jedd was shortest across sites (Table 4).

Circle, McCone County: Performances and relative values of yield, test weight and protein of spring wheat varieties at Circle are shown in Tables 5-8. O'Neal had greatest economic return.

Nashua, Valley County: Performances and relative values of yield, test weight and protein of spring wheat varieties at Nashua are shown in Tables 9-12. Vida had greatest economic return.

Poplar, Roosevelt County: Performance and relative values of yield, test weight and protein of spring wheat varieties at Poplar are shown in Tables 13-16. Kuntz had greatest economic return.

SUMMARY: Off-station yield trials are conducted at several sites in eastern Montana. All experiments reported under this project are of the replicated small plot type. These trials provide important information about performance of experimental lines and varieties from Montana State University, other state universities, and private companies.

FUNDING SUMMARY: Expenditure information to be provided by OSP. No other grants support this project.

MWBC FY2012 GRANT SUBMISSION PLANS: It is planned to submit this project for funding consideration in the next fiscal year.

Table 1. Summary of spring wheat yields in bu/acre at three off-station sites in eastern Montana, 2011.

Variety	Circle, dryland recrop	Nashua, dryland fallow	Poplar, dryland fallow	average
McNeal	39.6	44.4	58.7	47.5
Reeder	46.2	45.1	54.5	48.6
Outlook	45.3	42.0	62.9	50.1
Choteau	46.2	40.4	58.4	48.4
Vida	45.4	**48.8**	63.8	**52.6**
Ap604CL	42.8	43.5	57.3	47.9
Corbin	40.4	41.9	57.0	46.5
Kelby	37.7	46.0	64.6	49.4
Kuntz	40.2	48.0	**67.9**	52.0
Volt	43.9	46.2	59.5	49.9
Jedd	40.2	43.5	58.9	47.5
O'Neal	**46.3**	47.0	57.9	50.4
Mott	44.9	41.9	64.0	50.3
SY Tyra	42.6	45.2	62.4	50.1
Duclair	42.2	35.9	61.4	46.5
Gunnison	39.0	36.8	54.5	43.4
IMICHT79	43.6	42.4	64.3	50.1
Prosper	40.3	39.3	56.5	45.4
site average	42.6	43.2	60.3	48.7
probability	0.002	0.028	0.331	
CV (S/Mean)	6.3	9.798	10.07	
CV(SE/Mean)	3.7	5.657	5.813	
LSD 0.05	4.5	7.03	10.07	

Table 2. Summary of spring wheat test weights in lb/bu at three off-station sites in eastern Montana, 2011.

Variety	Circle, dryland recrop	Nashua, dryland fallow	Poplar, dryland fallow	average
McNeal	60.0	59.5	60.0	59.8
Reeder	60.5	60.0	61.5	60.7
Outlook	59.5	59.5	59.5	59.5
Choteau	60.5	59.5	59.5	59.8
Vida	60.0	60.0	61.0	60.3
Ap604CL	**62.0**	60.5	**62.0**	61.5
Corbin	60.5	59.5	60.5	60.2
Kelby	61.0	60.5	61.5	61.0
Kuntz	60.5	60.0	59.5	60.0
Volt	61.5	**62.0**	**62.0**	**61.8**
Jedd	60.5	61.0	61.0	60.8
O'Neal	60.0	60.0	60.0	60.0
Mott	61.5	60.5	61.5	61.2
SY Tyra	**62.0**	61.5	61.0	61.5
Duclair	60.0	59.5	59.0	59.5
Gunnison	61.0	60.5	61.5	61.0
IMICHT79	60.0	60.5	59.5	60.0
Prosper	61.0	60.0	60.0	60.3
site average	60.7	60.3	60.6	60.5

Table 3. Summary of spring wheat protein contents in percent at three dryland off-station sites in eastern Montana, 2011.

Variety	Circle, dryland recrop	Nashua, dryland fallow	Poplar, dryland fallow	average
McNeal	14.23	14.18	13.29	13.90
Reeder	15.38	**16.24**	15.06	15.56
Outlook	14.58	14.01	13.55	14.05
Choteau	14.95	14.54	13.87	14.45
Vida	15.66	15.33	14.66	15.22
Ap604CL	16.13	14.83	14.40	15.12
Corbin	14.49	15.19	14.44	14.71
Kelby	**16.45**	14.96	**15.68**	**15.70**
Kuntz	15.10	14.29	14.02	14.47
Volt	14.00	14.04	13.19	13.74
Jedd	14.52	14.19	13.68	14.13
O'Neal	15.35	14.55	14.09	14.67
Mott	14.53	14.78	14.02	14.44
SY Tyra	14.60	14.04	13.58	14.07
Duclair	14.15	13.93	13.77	13.95
Gunnison	14.30	13.71	13.99	14.00
IMICHT79	14.07	13.53	14.01	13.87
Prosper	14.37	14.09	15.05	14.50
site average	14.82	14.47	14.13	14.47

Table 4. Summary of spring wheat heights in cm at three dryland off-station sites in eastern Montana, 2011.

Variety	Circle, dryland recrop	Nashua, dryland fallow	Poplar, dryland fallow	average
McNeal	71.7	76.0	83.7	77.1
Reeder	71.7	74.7	87.3	77.9
Outlook	69.7	77.0	83.0	76.6
Choteau	70.7	70.7	76.7	72.7
Vida	70.7	79.0	83.3	77.7
Ap604CL	72.3	79.7	85.0	79.0
Corbin	69.7	76.3	82.0	76.0
Kelby	63.0	69.7	75.3	69.3
Kuntz	64.0	72.0	76.0	70.7
Volt	66.3	72.3	78.3	72.3
Jedd	58.7	61.0	67.7	62.4
O'Neal	71.0	75.7	78.7	75.1
Mott	77.0	83.0	94.3	84.8
SY Tyra	64.0	67.3	73.0	68.1
Duclair	66.7	78.7	80.7	75.3
Gunnison	64.7	69.7	75.3	69.9
IMICHT79	65.3	74.7	78.0	72.7
Prosper	67.7	77.3	81.7	75.6
site average	68.0	74.2	80.0	74.1
probability	<0.001	<0.001	<0.001	
CV (S/Mean)	4.9	4.5	5.719	
CV(SE/Mean)	2.8	2.6	3.302	
LSD 0.05	5.5	5.5	7.592	

Table 5. Performance of spring wheat grown under dryland fallow conditions at Circle, MT.
Planted: May 4, 2011 Harvested: September 15, 2011 Cooperator: Victor Wagner

Variety	height, cm	grain protein, %	test wt, lb/bu	Yield, bu/acre	$/acre[1] +/- Vida
O'Neal	71.0	15.35	60.0	46.3	5.85
Reeder	71.7	15.38	60.5	46.2	5.20
Choteau	70.7	14.95	60.5	46.2	5.20
Vida	70.7	15.66	60.0	45.4	0.00
Outlook	69.7	14.58	59.5	45.3	-7.44
Mott	77.0	14.53	61.5	44.9	-9.98
Ap604CL	72.3	16.13	62.0	42.8	-16.90
Volt	66.3	14.00	61.5	43.9	-22.92
SY Tyra	64.0	14.60	62.0	42.6	-24.59
IMICHT79	65.3	14.07	60.0	43.6	-24.78
Duclair	66.7	14.15	60.0	42.2	-30.51
Kuntz	64.0	15.10	60.5	40.2	-33.80
Corbin	69.7	14.49	60.5	40.4	-38.56
Jedd	58.7	14.52	60.5	40.2	-39.83
Prosper	67.7	14.37	61.0	40.3	-42.42
McNeal	71.7	14.23	60.0	39.6	-46.81
Kelby	63.0	16.45	61.0	37.7	-50.05
Gunnison	64.7	14.30	61.0	39.0	-50.57
average	68.0	14.82	60.7	42.6	
probability	<0.001			0.002	
CV (S/Mean)	4.9			6.3	
CV(SE/Mean)	2.8			3.7	
LSD 0.05	5.5			4.5	

[1] Wheat prices compiled and summarized by G. Carlson and P. Lamb, NARC, Havre, MT, from 10-yr (2000-2009) average daily market values for PNW, supplied by the Montana Wheat and Barley Committee.

Table 6. Relative yielding abilities of spring wheat varieties as compared to Vida when grown under dryland conditions in McCone County in cooperation with CES.

Cultivar	2006	2008	2009	2010	2011	Ave	as % of Vida
Vida	14.4	12.6	39.5	13.9	45.4	25.2	100.0
IMICHT79	--	--	--	--	43.6	43.6	96.0
Duclair	--	--	--	14.3	42.2	28.3	95.3
SY Tyra	--	--	--	--	42.6	42.6	93.8
O'Neal	--	12.2	29.8	12.3	46.3	25.2	90.3
Mott	--	--	31.2	12.6	44.9	29.6	89.8
Prosper	--	--	--	--	40.3	40.3	88.8
Gunnison	--	--	--	--	39.0	39.0	85.9
Reeder	12.9	11.9	26.9	10.1	46.2	21.6	85.9
Choteau	10.8	11.9	25.1	10.9	46.2	21.0	83.4
Jedd	--	13.8	28.4	9.4	40.2	23.0	82.4
Outlook	10.9	11.4	22.0	9.9	45.3	19.9	79.1
Corbin	--	11.7	23.7	10.3	40.4	21.5	77.3
AP604CL	--	--	26.3	6.7	42.8	25.3	76.7
Kuntz	--	7.0	28.7	7.7	40.2	20.9	75.0
McNeal	7.3	7.0	28.7	9.3	39.6	18.4	73.1
Volt	--	5.8	26.2	4.6	43.9	20.1	72.3
Kelby	--	11.3	24.4	6.3	37.7	19.9	71.5

NOTE: Average yields in this summary should not be compared to each other since they are not grown in the same years. Compare yields only to the check variety.

Table 7. Relative test weights of spring wheat varieties as compared to Vida when grown under dryland conditions in McCone County in cooperation with CES.

Cultivar	2006	2008	2009	2010	2011	Ave	as % of Vida
SY Tyra	--	--	--	--	62.0	62.0	103.3
AP604CL	--	--	60.0	62.5	62.0	61.5	102.4
Prosper	--	--	--	--	61.0	61.0	101.7
Gunnison	--	--	--	--	61.0	61.0	101.7
Mott	--	--	58.8	62.0	61.5	60.8	101.2
Reeder	58.3	59.5	59.3	62.5	60.5	60.0	100.8
Volt	--	59.8	59.0	61.0	61.5	60.3	100.7
Kelby	--	59.7	58.7	61.5	61.0	60.2	100.5
Jedd	--	60.5	60.3	59.5	60.5	60.2	100.5
Corbin	--	59.8	59.0	61.5	60.5	60.2	100.5
Kuntz	--	60.0	59.3	60.0	60.5	60.0	100.0
Vida	58.0	59.5	58.2	62.0	60.0	59.5	100.0
Duclair	--	--	--	62.0	60.0	61.0	100.0
IMICHT79	--	--	--	--	60.0	60.0	100.0
Choteau	58.8	59.5	57.3	61.5	60.5	59.5	100.0
O'Neal	--	59.5	59.8	58.5	60.0	59.5	99.2
Outlook	56.7	58.2	57.8	61.0	59.5	58.6	98.5
McNeal	55.7	57.0	58.0	60.0	60.0	58.1	97.6

NOTE: Average test weights in this summary should not be compared to each other since they are not grown in the same years. Compare test weights only to the check variety.

Table 8. Relative protein contents of spring wheat varieties as compared to Vida when grown under dryland conditions in McCone County in cooperation with CES.

Cultivar	2006	2008	2009	2010	2011	Ave	as % of Vida
Kelby	--	14.2	15.6	15.1	16.4	15.3	110.1
Corbin	--	14.6	16.1	13.9	14.5	14.8	106.1
Reeder	16.0	15.2	14.9	12.8	15.4	14.9	105.1
O'Neal	--	14.4	15.2	13.5	15.4	14.6	105.0
AP604CL	--	--	14.7	12.0	16.1	14.3	104.1
Mott	--	--	13.7	13.5	14.5	13.9	101.5
Choteau	14.8	14.0	14.8	12.3	15.0	14.2	100.3
Jedd	--	13.2	13.4	14.7	14.5	14.0	100.2
Vida	15.0	14.6	13.6	11.8	15.7	14.1	100.0
Outlook	15.2	13.8	14.5	12.3	14.6	14.1	99.6
Kuntz	--	13.5	13.5	13.3	15.1	13.9	99.5
Volt	--	14.2	13.7	12.8	14.0	13.7	98.2
McNeal	14.5	14.1	13.6	12.1	14.2	13.7	96.9
SY Tyra	--	--	--	--	14.6	14.6	93.0
Prosper	--	--	--	--	14.4	14.4	91.7
Duclair	--	--	--	11.0	14.2	12.6	91.6
Gunnison	--	--	--	--	14.3	14.3	91.1
IMICHT79	--	--	--	--	14.1	14.1	89.8

NOTE: Average protein contents in this summary should not be compared to each other since they are not grown in the same years. Compare protein contents only to the check variety.

Table 9. Performance of spring wheat grown under dryland conditions at Nashua, MT.
Planted: May 7, 2011 Harvested: August 25, 2011 Cooperator: Bill Lauckner

Variety	height, inches	Grain protein	Test weight	Yield, bu/acre	$/acre[1] +/- Vida
Vida	79.0	15.33	60.0	48.8	0.00
Kuntz	72.0	14.29	60.0	48.0	-16.24
Kelby	69.7	14.96	60.5	46.0	-18.20
O'Neal	75.7	14.55	60.0	47.0	-18.75
Reeder	74.7	16.24	60.0	45.1	-24.05
Volt	72.3	14.04	62.0	46.2	-30.76
SY Tyra	67.3	14.04	61.5	45.2	-36.96
Ap604CL	79.7	14.83	60.5	43.5	-37.93
McNeal	76.0	14.18	59.5	44.4	-38.81
Jedd	61.0	14.19	61.0	43.5	-44.45
Corbin	76.3	15.19	59.5	41.9	-44.85
Mott	83.0	14.78	60.5	41.9	-48.20
Outlook	77.0	14.01	59.5	42.0	-56.80
Choteau	70.7	14.54	59.5	40.4	-60.66
IMICHT79	74.7	13.53	60.5	42.4	-63.22
Prosper	77.3	14.09	60.0	39.3	-73.54
Gunnison	69.7	13.71	60.5	36.8	-92.72
Duclair	78.7	13.93	59.5	35.9	-94.62
average	74.2	14.47	60.3	43.2	
probability	<0.001			0.028	
CV (S/Mean)	4.458			9.798	
CV(SE/Mean)	2.574			5.657	
LSD 0.05	5.485			7.03	

[1] Wheat prices compiled and summarized by G. Carlson and P. Lamb, NARC, Havre, MT, from 10-yr (2001-2010) average daily market values for PNW, supplied by the Montana Wheat and Barley Committee.

Table 10. Relative yielding abilities of spring wheat varieties as compared to Vida when grown under dryland conditions in Valley County in cooperation with CES.

Cultivar	2006	2008	2009	2010	2011	Ave	as % of Vida
Kelby	--	16.0	29.5	44.9	46.0	34.1	104.9
AP604CL	--	--	30.9	44.4	43.5	39.6	103.7
Vida	37.2	15.4	25.0	40.8	48.8	33.4	100.0
Volt	--	15.4	30.8	35.1	46.2	31.9	98.1
Reeder	33.3	16.1	30.4	38.6	45.1	32.7	97.8
O'Neal	--	18.4	29.8	31.2	47.0	31.6	97.2
McNeal	27.9	17.7	26.9	38.8	44.4	31.1	93.1
SY Tyra	--	--	--	--	45.2	45.2	92.6
Kuntz	--	12.1	25.7	32.9	48.0	29.7	91.3
Jedd	--	15.4	29.3	29.0	43.5	29.3	90.2
Corbin	--	13.3	20.7	38.6	41.9	28.6	88.1
IMICHT79	--	--	--	--	42.4	42.4	86.9
Outlook	32.6	15.1	24.5	28.1	42.0	28.5	85.1
Prosper	--	--	--	--	39.3	39.3	80.5
Choteau	30.2	11.7	22.2	28.4	40.4	26.6	79.5
Gunnison	--	--	--	--	36.8	36.8	75.4
Mott	--	--	26.2	18.0	41.9	28.7	75.1
Duclair	--	--	--	25.8	35.9	30.9	68.9

NOTE: Average yields in this summary should not be compared to each other since they are not grown in the same years. Compare yields only to the check variety.

Table 11. Relative test weights of spring wheat varieties as compared to Vida when grown under dryland conditions in Valley County in cooperation with CES.

Cultivar	2006	2008	2009	2010	2011	Ave	as % of Vida
Volt	--	55.0	60.3	58.0	62.0	58.8	103.1
SY Tyra	--	--	--	--	61.5	61.5	102.5
Jedd	--	54.7	60.8	57.0	61.0	58.4	102.3
O'Neal	--	55.2	61.2	56.5	60.0	58.2	102.1
AP604CL	--	--	59.5	58.0	60.5	59.3	101.7
Kelby	--	53.8	59.3	58.0	60.5	57.9	101.5
IMICHT79	--	--	--	--	60.5	60.5	100.8
Gunnison	--	--	--	--	60.5	60.5	100.8
Reeder	58.3	54.1	59.8	56.5	60.0	57.7	100.5
Mott	--	--	58.8	56.5	60.5	58.6	100.5
Corbin	--	53.5	59.5	56.0	59.5	57.1	100.1
Kuntz	--	53.3	59.7	55.5	60.0	57.1	100.1
Vida	59.0	53.2	59.0	56.0	60.0	57.4	100.0
Prosper	--	--	--	--	60.0	60.0	100.0
Choteau	60.0	53.5	58.2	55.5	59.5	57.3	99.8
McNeal	56.5	54.7	59.3	56.5	59.5	57.3	99.8
Outlook	57.7	53.0	58.8	55.5	59.5	56.9	99.1
Duclair	--	--	--	54.0	59.5	56.8	97.8

NOTE: Average test weights in this summary should not be compared to each other since they are not grown in the same years. Compare test weights only to the check variety.

Table 12. Relative protein contents of spring wheat varieties as compared to Vida when grown under dryland conditions in Valley County in cooperation with CES.

Cultivar	2006	2008	2009	2010	2011	Ave	as % of Vida
Reeder	14.8	17.5	16.2	15.8	16.2	16.1	103.1
Vida	13.8	17.4	16.9	14.7	15.3	15.6	100.0
Corbin	--	17.6	15.3	15.0	15.2	15.8	98.1
O'Neal	--	17.4	15.8	15.2	14.6	15.8	98.0
Kelby	--	17.2	15.5	15.2	15.0	15.7	97.8
Mott	--	--	15.5	15.2	14.8	15.2	97.0
Duclair	--	--	--	14.8	13.9	14.4	95.7
Choteau	13.1	16.0	16.1	14.9	14.5	14.9	95.5
AP604CL	--	--	15.1	14.8	14.8	14.9	95.3
Jedd	--	17.0	15.2	14.4	14.2	15.2	94.6
McNeal	12.8	16.5	15.4	14.7	14.2	14.7	94.2
Outlook	12.2	16.6	15.2	14.9	14.0	14.6	93.3
Volt	--	17.2	14.2	14.5	14.0	15.0	93.2
Kuntz	--	16.1	14.8	14.5	14.3	14.9	92.8
Prosper	--	--	--	--	14.1	14.1	92.2
SY Tyra	--	--	--	--	14.0	14.0	91.5
Gunnison	--	--	--	--	13.7	13.7	89.5
IMICHT79	--	--	--	--	13.5	13.5	88.2

NOTE: Average protein contents in this summary should not be compared to each other since they are not grown in the same years. Compare protein contents only to the check variety.

Table 13. Performance of spring wheat grown under dryland conditions at Poplar, MT.
Planted: May 6, 2011 Harvested: August 29, 2011 Cooperator: Mark Swank

Variety	Height, cm	Grain protein	Test weight	Yield, bu/acre	$/acre[1] +/- Vida
Kuntz	76.0	14.02	59.5	67.9	11.38
Kelby	75.3	15.68	61.5	64.6	10.30
Vida	83.3	14.66	61.0	63.8	0.00
IMICHT79	78.0	14.01	59.5	64.3	-10.94
Mott	94.3	14.02	61.5	64.0	-12.80
Outlook	83.0	13.55	59.5	62.9	-32.83
Duclair	80.7	13.77	59.0	61.4	-35.06
SY Tyra	73.0	13.58	61.0	62.4	-35.82
Ap604CL	85.0	14.40	62.0	57.3	-45.74
Corbin	82.0	14.44	60.5	57.0	-47.65
Jedd	67.7	13.68	61.0	58.9	-50.31
O'Neal	78.7	14.09	60.0	57.9	-50.62
Choteau	76.7	13.87	59.5	58.4	-53.36
Reeder	87.3	15.06	61.5	54.5	-55.35
Volt	78.3	13.19	62.0	59.5	-59.14
McNeal	83.7	13.29	60.0	58.7	-63.86
Gunnison	75.3	13.99	61.5	54.5	-71.70
Prosper	81.7	15.05	60.0	56.5	-72.35
average	80.0	14.13	60.6	60.3	
probability	<0.001			0.331	
CV (S/MEAN)	5.719			10.07	
CV (SE/MEAN)	3.302			5.813	
LSD (0.05)	7.592			10.07	

[1] Wheat prices compiled and summarized by G. Carlson and P. Lamb, NARC, Havre, MT, from 10-yr (2001-2010) average daily market values for PNW, supplied by the Montana Wheat and Barley Committee.

Table 14. Relative yields of spring wheat varieties as compared to Vida when grown under dryland conditions in Roosevelt County in cooperation with CES.

Cultivar	2005	2006	2009	2010	2011	Ave	as % of Vida
Duclair	--	--	--	52.2	61.4	56.8	101.9
Kelby	--	--	55.1	54.0	64.6	57.9	101.5
Kuntz	--	--	56.6	48.3	67.9	57.6	100.9
IMICHT79	--	--	--	--	64.3	64.3	100.8
Vida	45.2	30.1	59.7	47.7	63.8	49.3	100.0
AP604CL	--	--	58.6	52.1	57.3	56.0	98.1
SY Tyra	--	--	--	--	62.4	62.4	97.8
Reeder	44.9	28.2	59.3	47.5	54.5	46.9	95.1
Mott	--	--	59.5	37.4	64.0	53.6	94.0
O'Neal	--	--	58.0	43.9	57.9	53.3	93.3
Choteau	42.7	22.9	58.0	47.6	58.4	45.9	93.1
Jedd	--	--	48.1	52.5	58.5	53.0	92.9
Outlook	42.9	29.9	53.0	37.9	62.9	45.3	91.9
Prosper	--	--	--	--	56.5	56.5	88.6
McNeal	41.9	27.5	50.7	38.8	58.7	43.5	88.3
Corbin	--	--	52.4	41.6	57.0	50.3	88.2
Volt	--	--	55.8	34.6	59.5	50.0	87.6
Gunnison	--	--	--	--	54.5	54.5	85.4

NOTE: Average yields in this summary should not be compared to each other since they are not grown in the same years. Compare yields only to the check variety.

Table 15. Relative test weights of spring wheat varieties as compared to Vida when grown under dryland conditions in Roosevelt County in cooperation with CES.

Cultivar	2005	2006	2009	2010	2011	Ave	as % of Vida
AP604CL	--	--	62.7	59.5	62.0	61.4	102.6
Volt	--	--	63.0	58.5	62.0	61.2	102.2
Kelby	--	--	62.5	58.0	61.5	60.7	101.4
Reeder	57.7	51.3	62.2	58.0	61.5	58.1	100.9
Gunnison	--	--	--	--	61.5	61.5	100.8
Jedd	--	--	62.0	57.5	61.0	60.2	100.6
O'Neal	--	--	62.7	57.0	60.0	59.9	100.1
Vida	57.0	51.7	61.0	57.5	61.0	57.6	100.0
Mott	--	--	61.5	56.5	61.5	59.8	100.0
SY Tyra	--	--	--	--	61.0	61.0	100.0
Kuntz	--	--	61.8	57.5	59.5	59.6	99.6
Corbin	--	--	61.3	57.0	60.5	59.6	99.6
Choteau	56.5	51.5	61.7	55.5	59.5	56.9	98.8
McNeal	56.7	50.5	61.0	56.0	60.0	56.8	98.6
Outlook	57.7	51.0	60.8	55.0	59.5	56.8	98.5
Prosper	--	--	--	--	60.0	60.0	98.4
IMICHT79	--	--	--	--	59.5	59.5	97.5
Duclair	--	--	--	55.0	59.0	57.0	96.2

NOTE: Average test weights in this summary should not be compared to each other since they are not grown in the same years. Compare test weights only to the check variety.

Table 16. Relative protein contents of spring wheat varieties as compared to Vida when grown under dryland conditions in Roosevelt County in cooperation with CES.

Cultivar	2005	2006	2009	2010	2011	Ave	as % of Vida
Kelby	--	--	13.4	16.2	15.7	15.1	106.1
Prosper	--	--	--	--	15.0	15.0	102.0
Reeder	18.2	17.9	12.4	15.4	15.1	15.8	101.5
Vida	17.5	17.6	12.4	15.6	14.7	15.6	100.0
Duclair	--	--	--	16.1	13.8	15.0	98.7
O'Neal	--	--	11.6	16.4	14.1	14.0	98.6
Corbin	--	--	12.2	15.5	14.4	14.0	98.6
AP604CL	--	--	11.9	15.4	14.4	13.9	97.7
Mott	--	--	12.0	15.6	14.0	13.9	97.4
Choteau	17.4	16.9	12.2	15.3	13.9	15.1	97.3
Kuntz	--	--	12.1	14.8	14.0	13.6	95.8
Outlook	17.0	17.1	11.5	15.0	13.6	14.8	95.4
Volt	--	--	11.3	16.2	13.2	13.6	95.3
IMICHT79	--	--	--	--	14.0	14.0	95.2
Gunnison	--	--	--	--	14.0	14.0	95.2
McNeal	17.2	17.3	11.3	14.9	13.3	14.8	95.1
Jedd	--	--	11.7	14.9	13.7	13.4	94.4
SY Tyra	--	--	--	--	13.6	13.6	92.5

NOTE: Average protein contents in this summary should not be compared to each other since they are not grown in the same years. Compare protein contents only to the check variety.